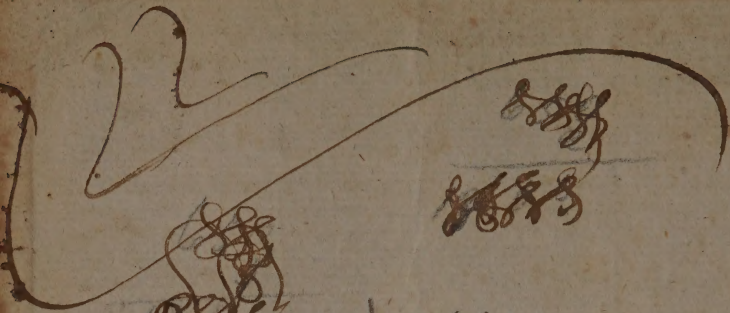


30227/2/3



~~scribbles~~

~~scribbles~~

~~scribbles~~

L. XXVII.

18/j

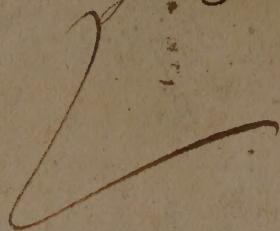
~~scribbles~~

4/6

~~scribbles~~

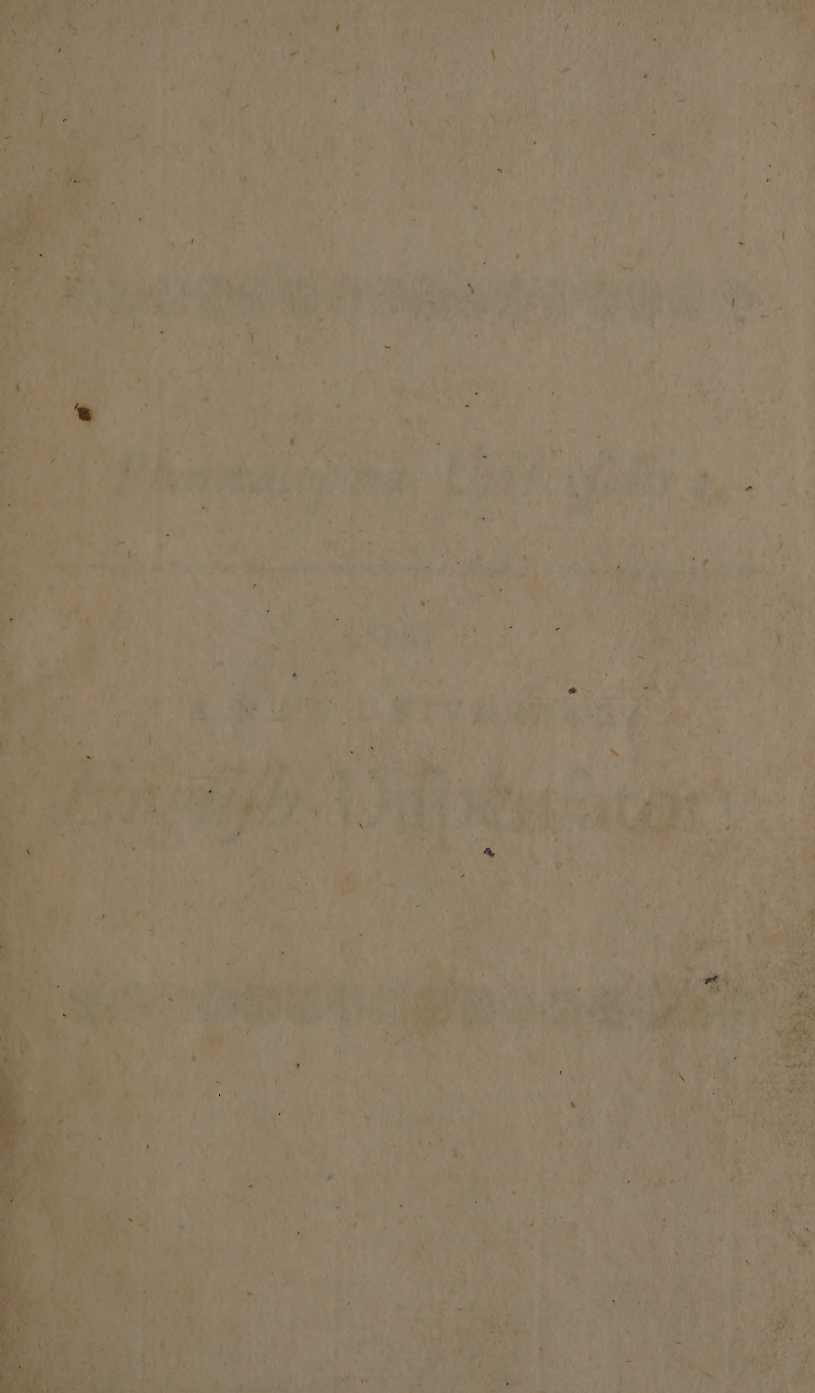
850

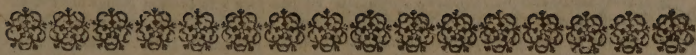
G. L. Gibbs.



6

$$\begin{array}{r} 1832 \\ 1747 \\ \hline 75 \end{array}$$



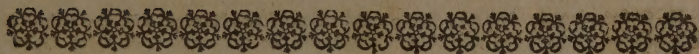


Pharmacopœia Universalis :

OR,

A NEW UNIVERSAL

English Dispensatory.



BOOKS just Published by the same AUTHOR,

And Printed for J. HODGES at *London-Bridge*.

I. **T**HE Modern Practice of Physick, as improved by the celebrated Professors *H. Boerhaave* and *F. Hoffman*, Physician to the late and present Kings of *Prussia*: Being a Translation of the Aphorisms of the former, with the Commentaries of *Dr. Van Swieten*, so far as was necessary to explain the Doctrine laid down; and of such Parts of *Dr. Hoffman's* Works, as supply the Deficiencies of *Boerhaave*, and render the whole Practice of Physick compleat; wherein the various Diseases to which the humane Body is subject, are distinctly considered; whence the Diagnostics and Prognostics, together with the Method of Cure, are regularly deduced, and the Prescriptions adapted thereto, from *Boerhaave's Materia Medica*, are added to every Aphorism. In 2 Vol. 8vo. Price 8s.

II. The Presages of Life and Death in Diseases. In Seven Books. In which the whole *Hippocratic* Method of predicting the various Terminations and Events of Diseases, is in a new and accurate Manner illustrated and confirm'd, not only by the Sentiments and Opinions of the ancient Physicians, but also by a long Course of attentive Observation and Experience. By *Prosper Alpinus*, Professor of Medicine and Philosophy in the University of *Padua*. Translated from the last *Leyden* Edition, revised and published by *Gaubius*, at the Request of *Dr. Boerhaave*.

Where is likewise to be had, lately Published,

With a Frontispiece, curiously engraved, representing an Instrument necessary to be used in one of the principal Operations,

I. **A** Physical Dissertation on Drowning: In which Submersion, commonly called Drowning, is shewn to be a long Time consistent with the Continuance of Life, from a Variety of unexceptionable, tho' surprising Facts, related by the most eminent and judicious Authors, and confirm'd by incontestable Evidence; which Facts are reconciled and accounted for, from the strictest Laws of the Animal Oeconomy. To which is subjoin'd the proper Measures for Recovery and Relief; the Obligations we lie under to practise them are clearly suggested, and strongly enforced; intended for the Good of Mankind, by restoring Life to many Persons who are erroneously supposed to be irretrievably drowned, Recommended particularly to the Consideration of the Surgeons of the Navy and Army, who have frequent Opportunities of practising the Methods recommended. With an Appendix, containing some Methods for the Recovery of those who hang themselves, and of Children supposed to be born dead. Price 1s.

II. Observations in Surgery: Being a Collection of two Hundred and Forty-three different Cases, with particular Remarks on each, for the Improvement of young Students. Also, the particular Receipts of such Remedies, as were used by the Author in each Case. Vol. I. Containing principally such Cases as relate to the Male Sex. Vol. II. The Method of Practice in difficult Labours, and other Distempers incident to the Female Sex, are copiously enlarged. Embellished with Copper Plates curiously engraved, representing those Parts where the principal Cases are particularly concerned. To which is added, a New Chirurgical Dictionary, for the Use of young Practitioners and Gentlemen residing in the Country: Explaining the Terms of Art contained in the Body of the Book: And likewise, all such as properly belong to Physick and Surgery. Written originally in French by *Henry Francis le Dran*, eldest Surgeon and Demonstrator of Anatomy at the Hospital *la Charite*, and *Mr. Saviard*, chief Surgeon and Operator in Midwifry, at the Hospital *Hotel Dieu* in *Paris*. Translated by *J. S. Surgeon*.

Pharmacopæia Universalis :

O R,

A NEW UNIVERSAL

English Dispensatory.

CONTAINING

- I. An Account of all the Natural and Artificial Implements and Instruments of Pharmacy, together with the Processes and Operations, whereby Changes are induc'd in Natural Bodies for Medicinal Purposes.
- II. Dissertations on the various Classes of Simples ; explaining their Operations and Uses in Practice.
- III. Catalogues of all the Medicinal Simples, wherein their particular Virtues and Uses are specify'd.
- IV. The Preparations and Combinations of Drugs ; containing all the Compositions directed in the *London* and *Edinburgh Pharmacopæias* ; together with others selected from the most celebrated Writers in Pharmacy and Physic.
- V. An exact Calculation of the Proportion of each Ingredient in given Quantities of all the Compositions of any Consequence.

With a Copious INDEX to the Whole.

By *R. JAMES, M.D.*

L O N D O N :

Printed for J. HODGES, at the *Looking-Glass*, over-against *St. Magnus's Church, London Bridge* ; and J. Wood, under the *Piazza of the Royal Exchange*. 1747.

PREFACE

Medicine, like all other Sciences, is, and always
will be, subject to Change; and its progress
is should be otherwise, particularly in the Prac-
tice of Physic. For the Discovery of any con-
siderable Simple of great Efficacy, or of any im-
portant Virtue in those we were before acquainted with, might
necessarily induce considerable Alterations in the Practice of the
Art. Thus the Introduction of the Bark, absolutely altered the
whole Practice of Physicians with Respect to Fevers. And per-
haps the greatest Revolution that ever happened in Physic, was
brought about by the Discovery of the Virtues of Mercury, a
Drug before well known, in the Cure of Syphilis. Formerly
it was the Custom for the Writers of Dispensaries to com-
pose their Compositions, and for Physicians to overlook them;
Prescriptions, with a great Number of superfluous Ingredients,
and hence the Efficacy of Medicines was rendered less certain,
and the Practice of Physic more precarious. But for the last
twenty or thirty Years, Physicians of the high Reputation for
Learning, Sense, and Skill in their Profession, seem to have
united in their Endeavours, to reduce this Literature within the
Bounds of Sense and Science; to pursue, among the Elements of
Physic, which bear no Part; and to restore the Art to that use-
ful Simplicity which alone is productive of Pleasure and Health.
And this Spirit of Reformation has induced every con-
siderable Change in the Modes of Practice, whilst it affords us
the agreeable Prospect of having the remaining Superfluities re-
formed.

P R E F A C E.

Medicine, like all other Sciences, is, and always must be, subject to Changes; and 'tis impossible it should be otherwise, particularly in the Practice of Physic. For the Discovery of any considerable Simple of great Efficacy, or of any important Virtues in those we were before acquainted with, must necessarily induce considerable Alterations in the Practice of the Art. Thus the Introduction of the Bark, absolutely alter'd the whole Practice of Physicians with Respect to Fevers. And perhaps the greatest Revolution that ever happened in Physic, was brought about by the Discovery of the Virtues of Mercury, a Drug before well known, in the Cure of Distempers. Formerly it was the Custom for the Writers of Dispensatories to embarrass their Compositions, and for Physicians to overload their Prescriptions, with a great Number of superfluous Ingredients; and hence the Efficacy of Medicines was render'd less certain, and the Practice of Physic more precarious. But for the last twenty or thirty Years, Physicians of the first Reputation for Learning, Sense, and Skill in their Profession, seem to have united in their Endeavours, to reduce this Luxuriance within the Bounds of Sense and Science; to prune away the Branches of Physic which bear no Fruit; and to restore the Art to that useful Simplicity which alone is productive of Pleasure and Advantage. And this Spirit of Reformation has induced a very considerable Change in the Modes of Practice, whilst it affords us the agreeable Prospect of having the remaining Superfluities retrench'd.

A new Dispensatory, therefore, suited to the modern Taste in prescribing, appeared both a useful and necessary Work. And this I have endeavoured to execute in the following Manner:

First, I have given a plain and intelligible Account of the grand Implements, by which all the Changes in sublunary Bodies are brought about both by Art and Nature; I mean the Air, Water, Earth, and Fire; particularly so far as they relate to Medicine and Pharmacy.

Secondly, I have attempted to give a just Idea of Acids and Alcalis; and of their Influences in the Continuation of Life, the Preservation or Recovery of Health, and the Production of Diseases.

Thirdly, I have given some Account of all those Operations, by which Changes are induced in all those Bodies, which are the Subjects of Pharmacy, and Chymistry.

Fourthly, I have given Dissertations on the various Classes of Medicines, into which Simples are usually divided, in order to explain what is meant by these Divisions, how the Effects ascribed to them are brought about, and how far they may be depended upon, consistent with sound Philosophy, and, what is much better, Experience.

Fifthly, I have taken Care to specify the medicinal Virtues and Uses of all the Simples employed in Medicine, from the best Authorities, whether antient or modern. These I have divided into three Classes, that of Vegetables, of Animals, and of Minerals; this Division appearing to me the most commodious. And I have distributed each of them alphabetically, according to the Latin Names. The English Names are referr'd to from the general Index.

The last Part consists of Preparations and Compositions; and with Respect to the latter, I think myself under no Necessity of making an Apology to the Public for having been more frugal of them than former Writers; because I am certain that there are

more

more than sufficient to answer every Occasion ; and besides, a perfect Acquaintance with the *Materia Medica*, will enable the judicious to combine Simples, and adapt them to particular Cases and Constitutions, in such a Manner, as to answer better Purposes than any of the Compositions of the Shops. And I must farther confess, that I think the unbounded Licentiousness of former Authors of Dispensatories, with Respect to the Number of Compound Medicines, together with the Encomiums they have bestow'd upon each, have greatly prejudic'd true Physic, by inducing abundant Perplexity, Error, and Confusion ; and after all, the Physician's Excellence can never depend upon the Multiplicity of Prescriptions, but upon a judicious Application of a few well-chosen Remedies.

Tho' the last Attempts of the Colleges of London and Edinburgh have done a great deal towards the Reformation of our Dispensatories, yet I am inclined to believe it would have been better if they had proceeded farther, and alter'd, or rather exchange'd their Medicines, whose Composition, notwithstanding their Antiquity, render them extremely ridiculous ; such I mean, as in the Quantity commonly given for a Dose, contain the Fraction of a Grain of some Ingredient, which alone might be taken in the Quantity of half an Ounce, without any considerable Effect, or Efficacy, as will appear by the following Table.

In a Book not intended so much to be regularly perus'd, as occasionally consulted, an Index should seem to be absolutely necessary ; I have, therefore, procur'd one, which appears to be more extensive and useful, than any that have occur'd to me in Books of this Kind. As it consists of near ten thousand plain References, the Reader will without Difficulty turn to whatever Subject he pleases.

In the whole Course of the Work, I have industriously suffer'd the Names of Bate, Fuller, Quincy, and even Salmon, with the rest of the Dispensatory Writers of our Country, to rest in Peace ; neither disturbing them by Censure, nor perfuming them with Incense ; because I apprehend that meer Books of Prescriptions are of too little Importance to be taken Notice of, much less to be transcrib'd ;

scrib'd; and besides, they tend to promote Quackery, to cover Ignorance, and veil the dirty Craft of the Designing and Ungenerous, without producing any one Advantage as an Equivalent.

But if any one should think otherwise, they are already in the Hands of every male and female Practitioner, and may be consulted without much Embarrassment to their Admirers.

Lastly, I have procur'd an exact Calculation of the Proportion of each Ingredient in given Quantities of all the Compositions of Consequence; which may serve for the Instruction of young Practitioners; and the Reprehension of old ones, who have been accusom'd to give Doses of Medicines, without any (honest) Intention.

As nothing is more uncertain and undetermin'd than the Doses of Simples, and nothing more difficult than to lay down general Rules with Respect to the Quantities adapted to particular Ages, Constitutions, and Distempers, I hope I shall be excus'd for having been less particular upon this Subject than might have been expected. In general, I am afraid 'tis customary to give too small Doses of simple Medicines. This was remarkably the Case of the Bark when it was first known in Europe, of which a few Grains only were exhibited at a Time; and for this Reason it had grown into Disrepute, and had so continu'd, if an Empiric had not learn'd by Experience, that much larger Doses were necessary to effect a Cure. At present, Musk, which may be exhibited to very good Purposes in the Quantity of half a Dram, is only given, generally, in a Dose of four or five Grains; and the same may be said of many others. I should, therefore, recommend it seriously to all Practitioners, as a Thing of the greatest Consequence, to endeavour to determine, by all prudent Means, in what Quantities Simples may be safely exhibited, and with what Effect.

A

CALCULATION

OF THE

Proportion of each Ingredient in given Quantities, of the principal Compositions.

CONFECTIO CARDIACA.

Quant.

Proportion of the Ingredients.

Grains

Half a Dram.	FRESH Rosemary Tops	}	each	$3,4297 = 6,8595$
	Juniper Berries			
	Leffer Cardamum Seeds,	}		$1,7143$
	freed from Hulks.			
	Zedoary	}	each	$1,7143$
	Saffron			
	Tincture drawn with 7,0001 of	}		$5,1430 = 5,1430$
	Spirits, and reduced, is			
	Compound Powder of Crabs Claws	}		$4,5714 = 4,5714$
	Cinnamon			
	Nutmeg	}	each	$0,5714 = 1,1428$
	Cloves			
	Double refin'd Sugar			$6,8571 = 6,8571$
			Grains	$30,0025$

CONFECTIO

CONFECTIO PAULINA.

Quant.

Proportion of the Ingredients.

Half a Dram.	Costus	}	each 9375.	is in all Grains	}	
	Cinnamon					
	Long Pepper					
	Black Pepper					
	Strain'd Storax					
	Strain'd Galbanum					
	Strain'd Opium					
	Ruffia Castor	}	is	22,5	}	
	Honey trip. to the whole					
	Species					
					Grains 30	

DIACASSIA.

<i>Half an Ounce.</i>	Pulp of Cassia	75,7914	
	Tamarinds	50,5276	
	Calabrian Manna	37,8957	
	Syrup of Damask Roses	75,7914	
		<hr/>	
		240	<i>Grains.</i>

ELECTUARIUM E CASSIA.

<i>Half an Ounce.</i>	Solutive Syrup of Roses	96,=96,	
	Pulp of Cassia fresh extracted	96,=96,	
	Manna	32,=32,	
	Pulp of Tamarinds	16,=16,	
		<hr/>	
		240	<i>Grains.</i>

DIASCORDIUM.

*Quant.**Proportion of the Ingredients.*

<i>One Dram.</i>	Leaves of Water German-der	}	<i>each</i>	1,6326 = 9,7959
	Cinnamon			
	Nutmegs			
	Japan Earth			
	Gum Arabic			
	Olibanum	}	<i>each</i>	2,4489 = 4,8979
	Roots of Tormentil			
	Bole Armoniac			
	Opium dissolved in a sufficient Quantity of Ca-		<i>is</i>	0,3061 = 0,3061
	nary.			
	Syrup of dried Roses boil'd to the Thickness of Honey, thrice the Weight of the Powders	}	<i>is</i>	44,9999 = 44,9999

Grains 59,9999

SPECIES E SCORDIO CUM OPIO.

<i>Two Scruples</i>	Bole Armoniac	10,0787 ℥c. ^a
	Scordium	5,0393 ^a
	Cinnamon	3,7795 ℥c. ^a
	Storax strain'd	2,5196 ℥c. ^a
	Roots of Tormentil	2,5196
	Bistort	2,5196
	Leaves of Cretan Dittany	2,5196
	Galbanum strain'd	2,5196
	Gum Arabic	2,5196
	Red Roses	2,5196
	Long Pepper	1,2598 ℥c.
	Ginger	1,2598
	Strain'd Opium	9448 ℥c. ^a

Grains 39,9898 = 2 3 ferē.

ELECTUARIUM E SCORDIO.

<i>A Dram.</i>	Species e Scordio cum Opio	45,
	Diacodium	135,
		<hr/> 180 Grains.

ELECTUARIUM CARDIACUM.

Quant.

Proportion of the Ingredients.

Thirty Grains.	Conserve of Rosemary.	}	each	6,2068=12,4137
	Red Roses			
	Orange Peel	}	each	4,1379=12,4137
	Citron Peel, and			
	Nutmeg, candied.			
	Ginger candied			3,1034= 3,1034
	Confection of Kermes			2,0689= 2,0689
	Distill'd Oil of Cinnamon			10,3448
	Syrup of Cloves a sufficient Quantity.			

Grains 29,9999

ELECTUARIUM E BACCIS LAURI.

Of the *London* Dispensatory.

Half an Ounce.	Leaves of Rue dried	}	each	12,= 48,
	Carraway Seeds			
	Common Parsley Seeds			
	Bay Berries			6,= 6,
	Sagapenum			
	Black Pepper	}	each	3,= 6,
	Russia Castor			
	Honey clarify'd			180 = 180

240 Grains.

ELECTUARIUM E BACCIS LAURI.

Of the *Edinburgh* Dispensatory.

Half an Ounce.	Conserve of Rue		123,8714
	Candied Ginger		61,9352
	Bay Berries		30,9676
	Zedoary		15,4838
	Russia Castor	}	7,7419
	Distill'd Oil of Fennel		
	Syrup of Orange Peel, a sufficient Quantity		

Grains 239,9999

ELEC-

ELECTUARIUM LENITIVUM.

Of the *London* Dispensatory.

Quant.

Proportion of the Ingredients.

	Dried Figs	38,4=38,4
	Leaves of Sena	25,6=25,6
	Pulp of Tamarinds	
<i>Half an Ounce.</i>	Cassia	} each 19,2=57,6
	French Prunes	
	Coriander Seed	12,8=12,8
	Liquorice	9,6=9,6
	Double refin'd Sugar	96,0=96,0
		<hr/>
		240,0 Grains.

ELECTUARIUM LENITIVUM.

Of the *Edinburgh* Dispensatory.

	Roots of Polypody of the Oak	1,9875=	1,9875
	Leaves of Mercury	} each	,9937= 1,9875
	Fenugreek Seed		
	Linseed	,9937=	,9937
<i>Half an Ounce.</i>	Spring Water	190,8 =	190,8
	Leaves of Sena	1,9875=	1,9875
	Coriander Seeds	0,4968=	0,4968
	Honey	23,85 =	23,85
	Pulp of Damask Prunes	11,9250=	11,9250
	Pulp of Cassia	5,9625=	5,9625
		<hr/>	
		Grains	239,9905

ELECT ARIUM E SCAMMONIO.

<i>ADram and a Half.</i>	Scammony	14,8965
	Cloves	7,4482
	Ginger	7,4482
	Essential Oil of Caraway Seeds	,6205
	Honey	59,5860
		<hr/>
		Grains 89,999, &c.

MITHRIDATIUM.

Of the *London Dispensatory*.

*Quan.**Proportion of the Ingredients.*

	Cinnamon	2,8= 2,8
	Myrrh	2,2= 2,2
	Agaric	} each 2, =14,
	Spikenard	
	Ginger	
	Saffron	
	Seeds of Treacle Mustard	} each 1,6=19,2
	Frankincense	
	Chio Turpentine	
	Camel's Hay	
	Costus	} each 1,4=1,4
	Indian Leaf	
	French Lavender	
	Long Pepper	
	Seeds of Hartwort	} each 1,4 is 5,6
	Juice of the Rape of Cistus	
	Strain'd Storax	
	Opoponax	
	Strain'd Galbanum	} each 1, =9,
	Balsam of Gilead	
	Russia Castor	
	Poley Mountain	
	Water Germander	} each 1,4 is 5,6
	The Fruit of the Balsam Tree	
	White Pepper	
	Seeds of the Cretan Daucus	
	Bdellium strain'd	} each 1, =9,
	Celtic Nard	
	Gentian Root	
	Leaves of Dittany of Crete	
	Red Roses	} each 1, =9,
	Seeds of Macedonian Parsley	
	The lesser Cardamum Seeds freed from Husks	
	Sweet Fennel Seeds	
	Gum Arabic	} each 1, =9,
	Opium strain'd	

Half an Ounce.

Root

Quant.

Proportion of the Ingredients.

Half an Ounce.	Root of the sweet Flag	}	each	$0,6=2,4$
	Root of wild Valerian			
	Aniseed			
	Sagapenum strain'd	}	each	$0,5=2,$
	Spignel			
	St. John's Wort			
	Juice of Acacia	}	each	$180,=180$
	The Bellies of Scinks			
	Clarified Honey triple the			
	whole Species			

 $3\text{ fs. }240\text{ Grains.}$

MITHRIDATIUM DAMOCRATIS.

Of the *Edinburgh* Dispensatory.

Half an Ounce.	Myrrh	}	each	$1,9191=15,3535$
	Saffron			
	Agaric			
	Ginger			
	Cinnamon			
	Spikenard			
	Male Frankincense			
	Seeds of Treacle Mustard			
	Balm of Gilead			
	Camel's Hay			
	Flowers of Arabian Stæchas	}	each	$1,5483=20,1249$
	Costus			
	Galbanum			
	Cyprus Turpentine			
	Long Pepper			
	Russia Castor			
	Juice of the Rape of Cistus			
	Calamita Storax			
	Opeponax			
	Indian Leaf			
	Cassia Lignea			
	Poley Mountain			
	White Pepper			
	Leaves of Water German-der			
	Seeds of the Cretan Daucus	}	each	$1,3548=10,8384$
	Carpobassilum			
	Trochisci Cyphæos			
	Bdellium	}		Celtica

PILULÆ EX COLOCYNTHIDE CUM ALOE.

Quant. Proportion of the Ingredients.

Half a Dram.	Socotorine Aloes	11,4285
	Scammony	11,4285
	Pith of Coloquintida	5,7142
	Oil of Cloves	1,4285

Grains 29,9999

PILULÆ EX COLOCYNTHIDE SIMPLICIORE.

Half a Dram.	Coloquintida	14,1147
	Scammony	14,1147
	Oil of Cloves	1,7643

Grains 29,9938

PILULÆ ECPHRACTICÆ.

Thirty Grains.	Aromatic Pill	13,8461 = 13,8461
	Rhubarb	} each 4,6153 = 13,8461
	Extract of Gentian	
	Salt of Iron	
	Salt of Wormwood	2,3076 = 2,3076

Grains 29,9999

PILULÆ ECPHRACTICÆ CHALYBEATÆ.

Thirty Grains.	Of the common Pills	14,4
	Gum Ammoniac	} each 4,8 = 9,6
	Rosin of Guaiacum	
	Salt of Steel	
	Elixir of Propriety, a sufficient Quantity,	6, Grains 30

PILULÆ ECPHRACTICÆ CUM ACULEO.

Quant.

Proportion of the Ingredients.

Thirty Grains.	Socotorine Aloes	}	each 6,8391 = 20,5714
	Extract of black Hellebore		
	Scammony		
	Gum Ammoniac	}	each 3,4287 = 6,8574
	Rosin of Guaiacum		
	Vitriolated Tartar		
	Distill'd Oil of Juniper		1,7143 = 1,7143
	Syrup of Buckthorn, a sufficient Quantity.		0,8571 = 0,8571

Grains 30

PILULÆ E STYRACE.

Eight Grains.	Calamite Storax	}	each 1,9047 = 1,9047
	Gum Dragant		
	Olibanum		
	Opium		
	Diacodium, a sufficient Quantity.		

Grains 7,9999

PILULÆ E STYRACE.

Six Grains.	Strain'd Storax	}	3,3103
	Saffron		
	Strain'd Opium		

Grains 5,9999

PILULÆ EX DUOBUS.

Thirty Grains.	Coloquintida	}	each 12,6312 = 25,2624
	Scammony		
	Vitriolated Tartar		
	Distill'd Oil of Cloves		

Grains 29,9999

PILULÆ FOETIDÆ.

Quant.

Proportion of the Ingredients.

Thirty Grains.	Affa foetida	15,
	Russia Castor	10,
	Camphire	5,
	Distill'd Oil of Hartshorn, a sufficient Quantity.	

 30 Grains.

PILULÆ DE GAMBOGIA.

Thirty Grains.	Socotorine Aloes	}	each 7,0588=28,2352
	Extract of Black Hellebore		
	Gamboge		
	Calomel	}	1,7647= 1,7647
	Distill'd Oil of Juniper		
	Syrup of Buckthorn, a sufficient Quantity.		

 Grains 29,9999

PILULÆ GUMMOSÆ.

Thirty Grains.	Gum Ammoniac	}	each 6,4864=12,9728
	Sagapenum		
	Russia Castor	}	each 4,8648= 9,7296
	Myrrh		
	Affa foetida	}	each 3,2432= 6,4864
	Galbanum		
	Distill'd Oil of Amber		,8108= ,8108
	Elixir of Propriety, a sufficient Quantity.		

 Grains 29,9999

PILULÆ LAXANTES.

Thirty Grains.	Of pure Quick-silver	12,=12
	Honey, a sufficient Quantity.	
	Gum Ammoniac	} each 6,=18
	Extract of black Hellebore	
	Rhubarb	

 Grains 30

PILULÆ

PILULÆ MATHÆI.

Quant.

Proportion of the Ingredients.

Eight Grains.	Russia Castor	2,2857=2,2857
	English Saffron	} each 1,1428=2,2857
	Opium	
	Soap of Tartar	3,4285=3,4285
	Balsam Capivi, a sufficient Quantity,	
		<hr/> Grains 7,9966

PILULÆ MERCURIALES.

Of the London Dispensatory.

Half a Dram.	Quick-silver	16,0714
	Strasburgh Turpentine	6,4285
	Cathartic Extract	4,2857
	Rhubarb in Powder	3,2142
		<hr/> Grains 29,9999

PILULÆ MERCURIALES.

Of the Edinburgh Dispensatory.

Thirty Grains.	Pure Quick-silver	10,
	Honey, a sufficient Quantity,	
	Gum Ammoniac	20,
		<hr/> Grains 30

PILULÆ PACIFICÆ.

Six Grains.	Russia Castor	1,7142=1,7142
	English Saffron	} each 1,8571=1,7142
	Opium	
	Soap of Tartar	2,5713=2,5713
	Balsam Capivi, a sufficient Quantity,	
		<hr/> Grains 5,9999

PILULÆ RUDII,

Quant.

Proportion of the Ingredients.

Eight Grains.	Roots of black Hellebore	} each	1,0885 = 2,1670
	Coloquintida		
	Spring Water		26,0044 = 26,0044
	Socotorine Aloes		1,0835 = 1,0835
	Scammony		0,5417 = 0,5417
	Vitriolated Tartar		0,1354 = 3,1354
	Distill'd Oil of Cloves		0,0677 = 0,0677

Grains 29,9999

EXTRACTUM CATHARTICUM.

Of the London Dispensatory.

Thirty Grains.	Socotorine Aloes		2,3376 = 2,3376
	Pith of Coloquintida		1,1688 = 1,1688
	Scammony	} each	
	Lesser Cardamum Seeds husk'd		0,7792 = 1,5584
	Proof Spirit		24,9344 = 24,9344

Grains 29,9999

PILULÆ RUFI.

Of the London Dispensatory.

Thirty Grains.	Socotorine Aloes	15,
	Myrrh	7,5
	Saffron	7,5

Grains 30,0

PILULÆ RUFI.

Of the Edinburgh Dispensatory.

Thirty Grains.	Socotorine Aloes	26,6666
	Myrrh	2,2222
	Saffron	1,1111
	Syrup of Orange Peel, a sufficient Quantity.	

30 Grains.

PILULÆ SAPONACEÆ.

Quant.

Proportion of the Ingredients.

Ten	Almond Soap	8,6486
Grains.	Strain'd Opium	1,0810
	Essence of Lemon	,1351

 Grains 9,8647

PILULÆ SCILLITICÆ.

Thirty	Spanish Soap	12=12
Grains.	Gum Ammoniac	
	Woodlice prepar'd	} each 6=18
	Fresh Squills	
	Balsam Capivi, a sufficient Quantity.	

 Grains 30

PILULÆ STOMACHICÆ.

Thirty	Socotorine Aloes	10,6666=10,6666
Grains.	Rhubarb	8 = 8
	Gum Ammoniac	4 = 4
	Extract of Gentian	} each 2,6666=5,3333
	Myrrh	
	Vitriolated Tartar	1,3333=1,3333
	Distill'd Oil of Mint	0,6666=0,6666
	Syrup of Sena and Rhubarb, a sufficient Quantity.	

 Grains 29,9999

PHILONIUM LONDINENSE.

Half a	White Pepper	} each 2,2222=6,6666
Drām.	Ginger	
	Carraway Seeds	
	Opium strain'd	0,8333=0,8333
	Honey clarified, thrice the Quant.	22,4999=22,4999

 Grains 29,9999

PULVIS ARI COMPOSITUS.

Quant.

Proportion of the Ingredients.

Twenty Grains.	Fresh dried Roots of Arum	
	Roots of Calamus Aromaticus	} each
	Roots of Pimpinell Saxifrage.	
	Crabs Eyes	
	Cinnamon	
	Salt of Wormwood	

7,8048=7,8048

3,9024=7,8048

1,9512=1,9512

1,4634=1,4634

0,9756=0,9756

Grains 19,9999

PULVIS BEZOARDICUS.

Thirty Grains.	Compound Powder of Crab's Claws	} 27,6923
	Oriental Bezoar	

6,5217

29,9999

PULVIS E BOLO COMPOSITUS CUM OPIO.

Half a Dram.	Bole Armoniac	10,6666 ℥c. $\frac{2}{3}$
	Cinnamon	7,1111 ℥c. $\frac{1}{3}$
	Tormentil Root	5,3333 ℥c. $\frac{1}{3}$
	Gum Arabic	5,3333 ℥c. $\frac{1}{3}$
	Long Pepper	3,8888 ℥c. $\frac{1}{3}$
	Opium	6,6669 ℥c. $\frac{2}{3}$

Grains 29,9999 ℥c. $\frac{2}{3}$

PULVIS E BOLO COMPOSITUS SINE OPIO.

Half a Dram.	Bole Armoniac	10,9999 ℥c.
	Cinnamon	7,2727 r.
	Tormentil Root	5,4545 r.
	Gum Arabic	5,4545 r.
	Long Pepper	9,0909 r.

Grains 30,0909 ℥c. $\frac{1}{3}$

PULVIS

PULVIS E CHELIS CANCRORUM.
Of the *London* Dispensatory.

Quant.	Proportion of the Ingredients.	
Thirty Grains.	Tips of Crab's Claws prepar'd	20=20
	Prepar'd Pearls	} each 5=10
	Red Roses	
		<hr/> 30 Grains.

PULVIS E CHELIS CANCRORUM.

Of the *Edinburgh* Dispensatory.

Thirty Grains.	Crabs Eyes	} each 5,=10,
	Red Coral	
	The black Tips of Crab Claws	20,=20,
		<hr/> Grains 30

PULVIS E CONTRAYERVA COMPOSITUS.

Of the *London* Dispensatory.

Thirty Grains.	Compound Powder of Crab's	} 23,4782
	Claws	
	Contrayerva Root	6,5217
		<hr/> 29,9999

PULVIS E CONTRAYERVA COMPOSITUS.

Of the *Edinburgh* Dispensatory.

Thirty Grains.	Contrayerva	7,0588
	Virginian Snake-root	2,6471
	Cochineal	1,7647
	English Saffron	0,8823
	Bole Armenic	5,2942
	Powder of Crab's Claws	12,3530
		<hr/> Grains 30

PULVIS DIASENÆ.

*Quant.**Proportion of the Ingredients.*

Thirty Grains.	Leaves of Sena	}	each 12=24
	Cream of Tartar		
	Scammony	}	each 3= 6
	Ginger		
			<hr/> Grains 30

PULVIS E SENA COMPOSITUS.

<i>A Scruple.</i>	Leaves of Sena	7,6150, ℥c. ^a
	Crytals of Tartar	7,6150, ℥c. ^a
	Scammony	1,9037, ℥c. ^a
	Cloves	,9518, ℥c. ^a
	Cinnamon	,9518, ℥c. ^a
	Ginger	,9518, ℥c. ^a
		<hr/> Grains 19,9898=1 ℥ fere.

PULVIS E MYRRHA COMPOSITUS.

<i>Thirty Grains.</i>	Dry'd Leaves of Rue	}	<i>each</i> 3,5293=13,5879
	Dittany of Crete		
	Myrrh		
	Assa Foetida	}	<i>each</i> 3,3529= 9,4116
	Sagapenum		
	Russia Castor		
	Opoponax		
			<hr/> Grains 19,9999

PULVIS

PULVIS EPILEPTICUS NIGER.

	Talus of a Hare calcin'd to Blackness	}	<i>each</i> 5,2285=10,4570
	Ivory ditto		
	Roots of Swallow Wort	}	
	Roots of Piony		
	Roots of Valerian	}	
	Hartshorn, calcin'd with- out Fire.		
	Red Coral, prepar'd	}	<i>each</i> 1,5686=12,5494
<i>Thirty</i>	Elk's Hoof		
<i>Grains.</i>	Amber prepar'd	}	
	Muscovy Glas, calcin'd		
	Shells of Oysters, prepar'd without Fire.	}	<i>each</i> 2,0915= 2,0915
	Herb Carduus Benedictus		
	Seeds of Columbine	}	<i>each</i> 1,0457= 2,0915
	Wild Poppies		
	Depurated Salt of Amber	}	1,5686= 1,5686
	Salt of Hartshorn		
	Oil of Mace	}	<i>each</i> 0,3485= 0,6971
	Oil of Camomile		

Grains 29,9780

PULVIS E SCAMMONIO COMPOSITUS.

<i>Eight</i>	Scammony	4,57142 ℥c. ^a
<i>Grains.</i>	Burnt Hart's-horn	3,42857 ℥c. ^a

Grains 7,99999 ℥c. ^a=8 *nea.*

PULVIS E SUCCINO COMPOSITUS.

	Prepar'd Amber	10,=
	Gum Arabic	10,=
<i>Two</i>	Juice of the Rape of Cistus	5,=
<i>Scruples</i>	Balaustines	5,=
	Japan Earth	5,=
	Olibanum	4,=
	Strain'd Opium	1,=

Grains 40,=2 9

THERIACA

THERIACA ANDROMACHI.

Of the *London* Dispensatory.

Quant.

Proportion of the Ingredients.

Troches of Squills	1,6 = 1,6
Long Pepper	} each 0,8 = 2,4
Opium strain'd	
Dried Vipers	} each 0,5333 = 1,0666
Cinnamon	
Balsam Gilead.	} each 0,4 = 2,4
Agaric	
Root of Florentine Orice	} each 0,2666 = 1,5999
Water Germander	
Red Roses	} each 0,2 = 1,6
Seeds of Navew	
Extract of Liquorice	} each 0,2 = 1,6
Spikenard	
Saffron	} each 0,2 = 1,6
Amomum	
Myrrh	} each 0,2 = 1,6
Costus	
Camel's Hay	} each 0,2 = 1,6
Roots of Cinquefoil	
Rhubarb	} each 0,2 = 1,6
Ginger	
Indian Leaf	} each 0,2 = 1,6
Leaves of Dittany of Crete	
Horehound	} each 0,2 = 1,6
Calamint	
French Lavender	} each 0,2 = 1,6
Black Pepper	
Seeds of Macedonian Par-	} each 0,2 = 1,6
ley	
Olibanum	} each 0,2 = 1,6
Chio Turpentine	
Roots of wild Valerian	} each 0,2 = 1,6

A

Dram.

*Quant.**Proportion of the Ingredients.*

<i>A</i> <i>Dram.</i>	Gentian Root	}	<i>each</i> 0,1333= 1,9999
	Celtic Nard		
	Spignel		
	Leaves of Poley Mountain		
	St. John's Wort		
	Ground Pine		
	Tops of creeping Ger-		
	mander with the Seed.		
	The Fruit of Bal. Tree		
	Aniseed		
	Sweet Fennel Seed		
	The lesser Cardamom Seeds		
	freed from their Husks.		
	Seeds of Bishop's Weed		
	Hartwort		
Treacle Mustard	}	<i>each</i> 9,1333= 0,7999	
Juice of the Rape of Cif-			
tus			
Acacia			
Gum Arabic			
Storax strain'd			
Sagapenum strain'd			
Lemnian Earth			
Green Vitrol calcin'd			
Root of creeping Birth-			
wort			
Tops of the lesser Cen-			
taury			
Seeds of Carrot of Crete			
Opopanax			
Galbanum strain'd	}	<i>each</i> 0,0666= 0,5333	
Russia Castor			
Jew's Pitch			
Root of sweet Flag			
Honey clarified, thrice the			
Quantity.	}	<i>is</i> 44,9999=44,9999	
			<hr/> Grains 59,9999

THERIACA ANDROMACHI.

Of the *Edinburgh* Dispensatory.

*Quant.**Proportion of the Ingredients.*

	Troches of Squills	1,5652=1,5652
	Vipers	
	The Mass of Hedycroon	} each 0,7826=3,1304
	Long Pepper	
	Opium	
	Roots of Slavonian Orice	
	Red Roses	
	Leaves of Water German-der	
	Agaric	} each 0,3913=3,1304
	Balsam of Gilead	
	Juice of Liquorice	
	Seeds of Navev	
	Cinnamon	
	Myrrh	
	Saffron	
<i>One Dram.</i>	Ginger	
	Rhapontic	
	Roots of Cinquefoil	
	Leaves of Calamint	
	Leaves of Horehound	
	Leaves of Dittany of Crete	} each 0,1656=2,7384
	Flowers of Arabian Stœchas	
	Camel's Hay	
	Seeds of Macedonian Parsley	
	Costus	
	Cyprus Turpentine	
	Male Frankincense	
	White Pepper	} each 0,1956=0,7824
	Black Pepper	
	Cassia Lignea	
	Spikenard	

*Quant.**Proportion of the Ingredients.*

Polium of Crete

Seeds of the Hartwort of
Marseilles

Aniseed

Seeds of Bishop's Weed

Amomum

Lesser Cardamoms

Fennel

Treacle Mustard

Roots of Gentian

Spignel

Wild Valerian

Sweet Flag

Leaves of Germandar

Ground Pine

St. John's Wort

True Acacia

Carpobalsamum, or Cubebs

Lemnian Earth

Calcin'd Brass Stone

Calamite Storax

Gum Arabic

Juice of the Rape of Cistus

Celtic Nard

Indian Leaf

Tops of lesser Centaury

Seeds of the Carrot of
Crete

Roots of small Birthwort

Jews Pitch

Galbanum

Opopanax

Sagapenum

Ruffia Castor

Of clarified Honey, thrice the
Weight of the Powders, of
Canary a sufficient Quantity.

} each 0,1304 = 3,1304

} each 0,0602 = 0,4816

} 45, = 45,

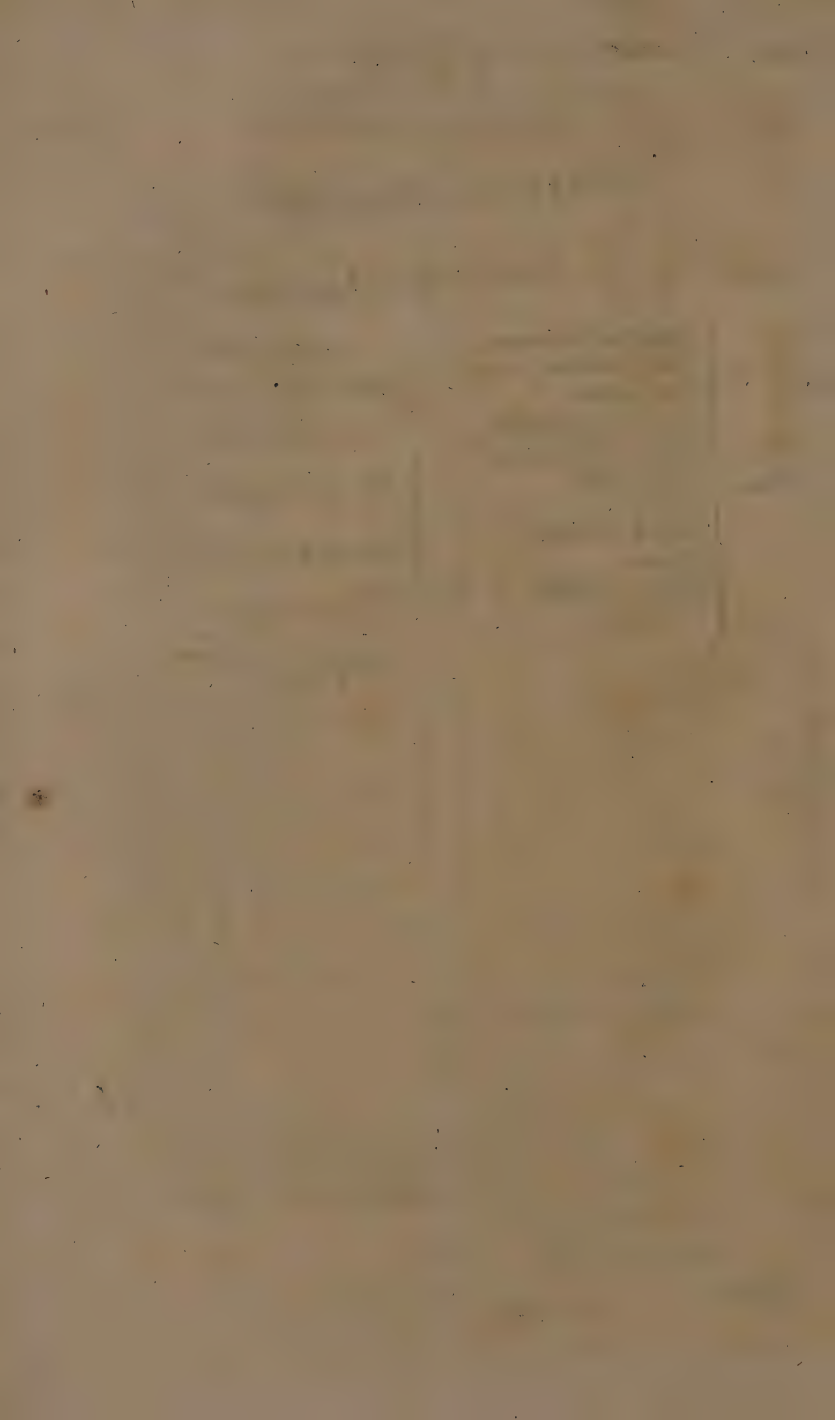
Grains 59,9598

THE

THERIACA EDINENSIS.

*Quant.**Proportion of the Ingredients.*

<i>One Dram.</i>	Virginian Snakeroot		3,6 = 3,6
	Wild Valerian	} each	2,4 = 4,8
	Contrayerva		1,8 = 1,8
	Powder of Diambra		
	Resine of Guaiacum	} each	1,2 = 3,6
	Russia Castor		0,6 = 1,2
	Myrrh	} each	0,6 = 1,2
	English Saffron		
	Opium		
	Honey clarified, a sufficient Quantity.	} 45, = 45,	
			<hr/> Grains 60,



THE INTRODUCTION.

IT is certain, that simple Remedies were principally employ'd to answer Medicinal Intentions, in the Infancy of Physic, and even after it became considerable under the Cultivation of *Æsculapius's* Posterity. And I am convinc'd, that an Ignorance of the History of Diseases and of the real Virtues of Simples, concurring with Ostentation, and false Theory, have introduc'd the copious and frequent Use of compound Medicines, to the infinite Prejudice of the healing Art; for after all the exaggerated Encomiums of their Inventors and Admirers, the Efficacy of most of them, and those the most celebrated, remains at this Day absolutely undetermin'd and precarious; infomuch, that it is doubted by some whether they are possess'd of any, and by others affirm'd that they have none at all, consider'd as Compounds. It should seem very extraordinary that any one Physician should make Use of any Medicine for six Months only, without being able to arrive at a Certainty as to the Reality of its Virtues, and to such a Degree as to put the Affair beyond Dispute. Yet it has happen'd unfortunately, that some Compounds have been us'd for many Centuries, and by ten thousand different People, without any uncontroverted Determination, with Respect to their Efficacy. Thus the *Venice Treacle* invented by *Andromachus* under the Reign of *Nero*, and the *Diafcardium* of *Pracastorius*, have been us'd by almost every Physician who has practis'd since their Publication; and notwithstanding this

abundant Experience, 'tis not yet certain, that they answer any medicinal Purpose so well as some one of their simple Ingredients; or that they contribute to the Cure of any one Disorder, better than less complex Remedies; and it even remains a Doubt whether they are best made with or without Honey, a principal Ingredient in the original Prescriptions.

Besides the Inconveniencies arising from this Uncertainty, the Introduction of Compounds into Practice, has been extremely prejudicial to medicinal Knowledge, by depriving Mankind for many Centuries of that Experience, which must long ago have determin'd, to a great Degree of Certainty, the Virtues of Simples; for if these alone had been us'd, their Efficacies must have been long ago ascertain'd beyond all Possibility of Contradiction; whereas at present there is scarcely any one Virtue ascrib'd to any Substance, whether animal, vegetable, or mineral, that has not been, and is not at this Day controverted by some one or other. But as Compositions open a large Field for Sophistications and Frauds, for this, if for no other Reason, their exorbitant Use in Medicine should, in common Prudence, be limited, and more simple and less precarious Medicines, which are not so liable to Adulteration, substituted in their Room. And it is with the greatest Satisfaction I congratulate Mankind on the Prospect of seeing the Grievances I have taken Notice of redress'd, by a Contraction of the Dispensatories, and retrenching superfluous Compositions; and by the united

Endeavours of the greatest Practitioners of the last and present Age, to render Physic a less precarious Science, by establishing an accurate History of Diseases, and ascertaining the Efficacy of Simples, in order to their Cure. But as even these, and particularly such as are produc'd in foreign Countries, are subject to Sophistications, Apothecaries ought to make themselves acquainted with the Nature of Drugs, to a great Degree of Accuracy, in order to avoid Imposition, and to secure to themselves the Satisfaction of having done their Duty. They should, farther, use no Compositions of any Kind, but such as are made under their own immediate Inspection. And with Respect to Chymical Medicines in particular, it should seem not only imprudent, but dishonest, to place too great Confidence in the Care or Integrity of any other Person; because this Branch of Business abounds with infinite Frauds, in their Consequences extremely injurious to the Prescriber, the Dispenser, and the miserable Patient.

Custom and the Legislature, in Imitation of all the civiliz'd Nations of *Europe*, have very wisely provided for the Interests and Health of the Subject, by assigning to distinct Bodies of People, their different Provinces in Physic; both because each Branch is sufficiently extensive to engross the whole Attention of any one Man; and because every Division is a Sort of Check upon another, so as to guard against the Effects of Artifice and Avarice, which might otherwise influence these as well as all other lucrative Professions. Thus the Druggist is restrain'd from providing bad Materials, by the Knowledge of the Apothecary who is to purchase them. And as an Encouragement to Industry and Integrity, the Apothecary is indulg'd in several valuable Privileges and Immunities, which are deny'd to all other Trades. And besides this, the universal Consent of Mankind has al-

low'd him very considerable Advantages in every Thing he vends; and this with great Justice and Prudence; for 'tis certainly the Interest of every Individual to contribute to the Support of the Person whose Conduct has so great an Influence on Health and Life, and that in such a Manner, as to place him in a Rank above Temptation to a base or dishonest Action. But lest this very Indulgence should defeat the End for which it was design'd, and produce the Inconveniencies it was intended to prevent, it was prudently provided, that the Vender of Medicines should not have the Direction of their Use; for otherwise, the Consideration of private Advantage might influence him to advise more Remedies, than are absolutely necessary for a Cure, to the great Prejudice of the Patient's Fortune and Health, and Danger of his Life. This Trust, therefore, was repos'd entirely in the Physician, who is suppos'd to have the Advantage of a generous and a learned Education, which is certainly less subject to distort the Morals, and bias them to the Side of Gain, than mechanical Professions. But in Consideration of human Frailties, he is prudently restrain'd from vending the Remedies he prescribes, lest he should, also, be tempted to deviate from that Rectitude, which from his Character and Situation, the World has Reason to expect he should religiously adhere to.

It is from Considerations no less prudent, that all civiliz'd Nations in the World have divided Surgery from Physic, and assign'd to the Surgeon the executive Part in all external Disorders, and to the Physician the Province of judging, and directing what is proper to be done for the Relief of those who are so unfortunate as to fall under their Care; for by this Means, the Patient is infinitely better secur'd against Error and Avarice, than if the Parts both of Judging and Acting were trusted to one Individual.

I cannot dismiss this Subject without taking Notice of the Chymist, a Weed produc'd within this half Century, in the too rank Soil of Pharmacy for Want of due Cultivation; for if the Apothecaries had, in pursuance of their Duty, taken Care to prepare their own chymical Medicines, this Trade would never have been establish'd as a distinct Branch; nor would Occasion have been given for the infinite Frauds which are now daily practis'd; because however the Chymist may find his Account in sophisticating his Preparations, which he makes in Quantities sufficient to furnish perhaps five hundred Shops, no single Apothecary could find it answer any lucrative Views, to adulterate for the Sake of the trifling Advantage he might expect from the Demands of his own.

But in the present Situation of Physic, all Manner of Distinction betwixt the different Provinces, is absolutely confounded and destroy'd, and perhaps no one Abuse deserves more the Interposition of the Legislature, than those introduc'd into Medicine by the Encroachments of the different Branches upon each other. Thus the Chymist compliments his Customers with the Refuse of Drugs; and the Druggist, by Way of Retaliation, furnishes his with Chymicals equally bad. The Apothecary commences, a most contemptible Surgeon; the Surgeon on his Part, professes Pharmacy with the same Degree of Knowledge and Success; and both in Spight of Education and Reason, are, by a Kind of Magic, peculiar to themselves, converted into most execrable Doctors. Insomuch, that it only remains, that the Physicians, should become very bad Apothecaries; and then we may expect to see Medicine practis'd in *Great Britain*, much as it is among the Savages of *America*, tho' I am afraid not so safely, nor with equal Success.

I would by no means have it understood, that the private Interest of

the Physicians, has tempted me to make these Observations; on the contrary, I solemnly declare, that I now plead as a Member of Society, and out of Regard to the public Welfare. And I am abundantly convinced, that the present Confusion among the different Branches of Physick, imposes a Tax upon the Public, in Favour of Physicians, to the annual Amount of a great many thousand Pounds. Thus if the Druggist, always furnished Simples good in their Kind, and the Apothecary discharg'd his Duty in preparing them, without confiding in Chymists and wholesale Dealers, more Distempers would be cured with fewer Attendances. It is farther observable, that acute Distempers in particular, are much more easily remedied at first, than after they have made any considerable Progress. Now in these Cases a judicious Physician knows the Methods of checking, at least nineteen out of twenty, in their Infancy, whilst a sufficient Degree of Strength remains, to co-operate with the Remedies prescribed; so that two or three Visits, are all that can be necessary. Whereas if the Case happens to be conducted, by one, who practises by Habit, and at Random, he generally endeavours to extort Sweats, at the very Beginning, by Cordials and Volatiles; and by this preposterous Treatment the Disease is so rivetted, and the Constitution so injured, as to require six times the Attendance that would otherwise, have been required. And the Patient has more than common good Fortune, if he escapes, the fiery Trial, at last, with Life.

With Respect to my present Undertaking, it may be expected that I give some Reasons for publishing a Dispensatory, after *Quincy*, whom I have represented in another Place as an excellent Judge of Pharmacy. In the first Place then it must be consider'd, that since his Time, the Physicians of *Edinburgh* have publish'd an excellent Dispensary, and this Example has

4 The INTRODUCTION.

been followed by our own College. Besides, *Boerhaave, Stahl, Hoffman, Neuman*, and several other Writers, of the first Class, have made many useful Discoveries in the Chymical Pharmacy, to which it appears he was an absolute Stranger. And many Advances have been made, towards a more intimate and certain Acquaintance with the *Materia Medica*, which either escaped his Researches, or came to the Knowledge of the learned World too late to be expected in his Writings.

Secondly, This Author has been much too liberal in his Directions, for the Application of Compounds in particular; and by ascribing to Medicines Virtues, which they in no Degree possess, and bestowing on others Encomiums they by no Means deserve, has misled young Practitioners, and induc'd them to depend too much upon the Efficacy of Prescriptions, and to neglect the more essential Parts of medicinal Knowledge; for whoever should place an implicit Confidence in *Quincy's* Recommendations, would be inclined to believe no other Book necessary to form a Practitioner; and that no Patient could hereafter die of a Disease, that could be prevailed on to take the Remedies he extols beyond the Bounds of Probability, Reason, and Experience.

Our Author has, farther, done no small Prejudice, to true medicinal Knowledge by his great Licentiousness in Philosophizing, and reasoning mechanically, as he calls it, upon Principles either manifestly false, or at best precarious; frequently proposing uncertain Suppositions of his own, or of other Authors, as undoubted Facts, and thus imposing upon the injudicious the Chimæras of a luxuriant Imagination, for physical Truths. *Quincy*, has given a great Number of Prescriptions, from Authors of our own Country, as *Bates, Fuller*, and even *Salmon*, which are in the Hands of every Body, and universally known;

but he has taken no manner of Notice of a great Number of celebrated Compositions which occur in foreign Writers, and which it would have been more useful to describe; because the Understanding these Authors, would thereby have been facilitated; and the Shops would more readily have known what was meant, when these Medicines were taken Notice of in the Prescriptions of foreign Physicians, or our own.

In the Execution, therefore, of this Undertaking, I have endeavoured to preserve the Excellencies of *Quincy*, to avoid his Errors, and to supply his Defects; and how far I have succeeded, I must leave to the Judgment of others.

Mean time I must remark, that most of the principal Operations in Chymistry are performed naturally in the open Air, without the Assistance of Art; and that most Bodies, undergo the same Kind of Changes, by the natural Action of Air, Water, and Fire, in a longer Space of Time, as they do in the Laboratories of Chymists in a shorter. Thus *Hartshorn*, for Example, exposed for a long Series of Time to the open Air, undergoes a perfect Distillation; for the Water, Oils, and volatile Salts exhale and leave a *Caput Mortuum*, or mere insipid Earth. And the same may be said of all vegetable, and animal Substances. With Respect to Metals, all of them, except Gold, are corroded or dissolved in the Air, and by the very same *Menstruum* which Chymists employ for their Solution, that is, a certain Acid, with which the Air abounds, and which does not much differ from that distilled from Nitre. In order, therefore, to give a perfect Insight into the chymical Part of Pharmacy, I shall first consider the Nature of the Air, as of the greatest Influence, and this, both as it affects the human, as well as every sublunary Body. And with the same View I shall enquire into the Nature of Water, Fire, and Earth.

THE NEW
English Dispensatory.

BOOK I.

CHAP. I.

Of AIR.

THE Air in general is that fluid Mass, which every where surrounds the terraqueous Globe. 'Tis call'd the Atmosphere, is so applied to the Surface of our Earth as continually to touch all the Parts thereof, and is not only the Seat of Tempests, Storms and Thunder, but also the common Vehicle, or Medium, thro' which, Sounds, Smells, and Light are convey'd.

This Air in which we continually subsist is impregnated with Corpuscles of all Kinds, insinuates itself into the penetrable Interstices of all Bodies, remains conceal'd in these Interstices, and is again discharg'd from them, when such Bodies are resolv'd into their Elements or constituent Parts. This Fluid is absolutely necessary to the Preservation of Life, since we draw it in during Inspira-

tion, and force it out in Expiration; so that both Nature and Art seem to use its Influence and Assistance in all their Works; for which Reason it is called the Principle necessary to promote the Generation of Things, and by *Seneca* in *Qu. Nat. L. 2. cap. 4.* a necessary Part of the Universe. This is a Description of the Air sufficiently accommodated to the Senses of every one; but if it should be ask'd what this Fluid is, the Philosopher must confess his Ignorance, and be content with describing Air from its most obvious, and best known Properties.

The Air, then, is first to be considered as a fluid Body whose Parts, tho' invisible by means of the finest Microscope are yet continually in Motion. These Parts separately, cannot enter the Pores of many Bodies, thro' which other Liquors readily pass but the Parts of the Air cannot be excluded from those Places,

into which Liquors containing Air can enter. The Parts of this Fluid, have also what is call'd a mutual Attraction, and when many of them adhere to each other in a spherical Form they constitute what we call a Bubble of Air, and then by a certain Tenacity, greater than in other Liquors, they resist Dissipation, and for that Reason are with greater Difficulty than any other known Fluids, incorporated with other Liquids. But when these Parts are separated and divided, they forthwith incorporate themselves with every Body destitute of Air, and adhere firmly in their Interstices, till a greater Force separates them, and forces them into Bubbles, either by means of an Air Pump, by boiling over the Fire, by Frost, by fix'd alkaline Salts, by Effervescence, by chymical Distillation, Fermentation, Putrefaction, or Combustion. The Particles of Air dispers'd thro' the minute Interstices of Bodies, possess a smaller Space than when being reduc'd to Bubbles, they are separated or drawn from such Bodies. The Quantity of Air contain'd in Bodies bears a Proportion to the Number of their Interstices, and the Particles of the Air by their Tenacity adhere to the very smoothest and best polish'd surfaces of all Solids, till by Wind, Heat, or a rapid Motion, they are thrown off from them and make Room for the Succession of fresh Air. The Air dispers'd thro' the minute Interstices of Bodies, is call'd the internal Air, and does not act like the common Air, so long as it is divided and not collected together. The external Air is that which surrounds and encompasses all Objects whatever. We cannot affirm that the Particles of Air are larger than those of Water, because those of the latter Fluid make their way thro' some Bodies, thro' which Air cannot pass; for the Parts of Water, perhaps on Account of their greater Density are

better calculated to force a Passage thro' the Pores of Bodies than those of Air.

The second Property of the Air is that Resistance or Opposition which it makes to Bodies, especially to such as under large Surfaces contain small Quantities of Matter, when mov'd thro' it, and this Resistance is increas'd according to the Augmentation of the Velocity of the moving Bodies, which according to the Principles of Mechanics, is in a duplicate Proportion.

The Weight or specific Gravity of the Air never remains long the same, but varies very surprisngly; first, according to the State of the Weather, since a Change of its Weight or Gravity is produc'd by Meteors, Rains, Clouds, Hail, Snow, Lightning, Thunder, Winds blowing from various Quarters, Storms, Whirlwinds, Dryness, and the various Aspects of the Planets. Secondly, according to the Season of the Year. Thirdly, according to its different Altitudes; for the inferior Part of the Air is always heavier than the superior. In *Europe* it has hitherto been found, that the Difference of the greatest and smallest Weight of the Air, is about the tenth Part of the greatest, and when its Mean or middle Weight is compar'd with the Weight of Water, the former is generally found eight hundred and fifty Times higher than the latter. But the gravitating Force of the whole Atmosphere is generally equal to that of a Column of Water of 32 or 33 Feet high, or that of a Column of *Mercury* 28 or 30 Inches high. Mr. *Homburg* weigh'd a glass Globe full of Air, and of 20 Inches Diameter, and found it three Ounces, three Drams and $\frac{1}{4}$ heavier than when the Air was exhausted from it. This Globe or Receiver contain'd two cubical Feet, and $\frac{1}{12}$ of Water so that a cubical Foot of Air weighs one Ounce and forty-eight

eight Grains. *Hales* in his *Statics* computes that a cubical Inch of Air weighs two Sevenths of a Grain. As the Gravity of the Air, is to be determin'd from its Contents, so the following Observations may be taken as so many Axioms. The heavier the Air is, the greater Weight of Mercury it is equal to in the Barometer; hence the Mercury becomes higher in the Tube, but suddenly subsides when the Gravity of the Air is diminish'd. In serene, and especially dry Weather the Air becomes more weighty, and the Water ascends higher, and is more distributed and dispers'd in the Air. But if the Barometer denotes a great Weight of the Air, whilst at the same Time there are thick and fetid Clouds, then the aqueous Parts hang low in the Air, and are almost accompanied with gross oleous and saline Exhalations which cannot at such a Time be accurately and equally mix'd, distributed, and united. Whereas when the Barometer denotes a diminish'd Weight of the Air, in hot and cloudy Weather, then the Water descends to the inferior Parts, but with an equable and very moistening Vapour, tho' it is not as yet rainy Weather.

Upon the Gravity or Weight of the Air also depends its Pressure; hence the greater the Weight of the Air is, the more powerfully it presses Bodies, and the smaller its Weight, the less it presses upon them. The Air also presses Bodies the more, the nearer they are to the Center of the Earth, and the less, the farther they are from it. Bodies lodg'd in the Air are not long press'd by the same Force, so that the Constriction of Bodies, so far as it depends upon the Compression of the Air, varies almost every Moment, only in the same Place, the Difference of Pressure is never greater than one Tenth of the Whole, within which there is a perpetual Vicissitude. Hence in Bodies

lodg'd in the Air, there is a Kind of perpetual Oscillation corresponding to the reciprocal Augmentation or Diminution of the Weight of the Air comprehended within the tenth Part of the Whole. Whilst the Air presses, it is also proportionally compressed by all elastic Bodies. But as the heterogeneous Contents of the Air contribute more or less to its Weight, *Boerhaave* suspects that pure Air entirely free from the Admixture of foreign Corpuscles, would perhaps have no Weight at all. On the Force of the pressing Atmosphere it depends that two brazen Hemispheres firmly cohere when the Air is extracted from their Cavities, nor can they be divided unless the Pressure of the incumbent Air is counterballanc'd by the Application of a superior Force. Hence it is that the Sides of a Pair of Bellows cannot be separated, if all the Holes and Fistures in them are accurately stop'd up.

A fourth Property of the Air is its Elasticity: This Quality, among all other known Fluids is at all Times peculiar to the Air alone. In Consequence of this Property, all Air possessing a certain determinate Space from which it cannot make its Escape, is compress'd into a Space smaller in Proportion to the Weight acting upon it, and the more the compressing Weight is diminish'd, the more it spontaneously possesses a larger Space, and at last always returns to its former State when the compressing Force is the same it was before. The smallest Space into which, according to Observation, Air can be compress'd, is sixteen Times less than the Space it naturally occupies; and the greatest Space to which it can spontaneously expand itself is, thirty two Times its natural Space. With respect to this Property of the Air, the following Remarks are to be made: First, Compress'd Air is call'd dense or condensed

Air, whereas that which is expanded is said to be rarified: Secondly, The Density of compress'd Air, bears a Proportion to the compressing Weight: Thirdly, Air when most strongly compress'd neither transudes thro' Glass nor penetrates the Pores of Mercury: Fourthly, Air is condens'd not only by an Increase of Weight, but more particularly than any other known Body, by Cold. But Air may be condens'd between the Degrees of Heat in boiling Water, and the most intense known Cold, to about one Half of the Whole. It has been affirm'd that Air is capable of Compression, because its Particles do not touch each other, and that if the Particles of Air touch'd each other, it would become as hard as Marble: Fifthly, By Heat, Air is rarified, that is, obtains a Power of expanding itself every where sooner than any other fluid Body, in so much, that there are no known Limits to this Dilatation produc'd by Fire. But the Dilatation is always the same in equal Degrees of Heat; so that the Rarefaction bears a Proportion to the Degrees of the increas'd Heat, and the Compression of the Air before the Rarefaction: Sixthly, The higher or more remote the Air is from the Surface of the Earth, the more rare it always is: Seventhly, The Elasticity of the Air existing in every Portion of it is equivalent to the Weight of the whole Atmosphere, which it can sustain without being any more condens'd than the compressing incumbent Column of Air. The Air by Means of its Elasticity and expansive Faculty repels Objects with a Force equal to that with which they act upon it. Thus *Boerhaave* tells us, "That a small Portion of Air pent up in any Place, is capable of producing the same Effects which depend upon a large Quantity of Air in its natural State; for if the common Air is

"receiv'd into any Cavity which
 "may be easily compress'd on all
 "Sides, it will remain there; and
 "from that Place totally remove the
 "Pressure of the Atmosphere. But
 "when the Air in such a Cavity is
 "heated by the Fire, or freed from
 "external Pressure, it is forthwith so
 "expanded as to produce Effects equal
 "to those of the greatest Quantity of
 "Air. 8thly, The elastic Force is less in
 Air impregnated with Vapours, than
 in such as is pure and serene. Ninthly,
 Air condens'd by Cold produces
 the same Effects with Air render'd
 heavier. Hence it is infer'd that a
 cold Wind acts more powerfully on
 the Sails of Ships than such as is
 warm. Tenthly, Rarified Air possesses
 the Power of Air render'd
 more elastic, which Power always
 increases in a compound Ratio of
 the augmented Heat, and the former
 Compression of the Air. Eleventhly,
 The Air by its Elasticity produces
 Effects similar to those of its Gravity,
 so that its Want of Gravity is compensated
 by its Elasticity. From this elastic
 Quality of the Air produc'd
 by Rarefaction, we can assign a Reason
 why when the Sun is rising or
 just appearing above our Horizon we
 perceive a greater Cold in the Atmosphere
 than we did the preceding Night;
 for the solar Rays, before they can
 reach us in such a Quantity as to warm
 our Atmosphere, have in the superior
 Region produc'd a Rarefaction of the
 Air, which by its Elasticity presses
 and applies more strongly to us the
 Causes of the Cold before dispers'd
 thro' our Atmosphere. Thus, also, 'tis
 said, the Force of Gunpowder exploded
 from a Gun, depends upon the compressed
 Air lodg'd in the Nitre, by the Fire
 rarified and render'd more elastic.
 Glass Bubbles, artificial Fountains,
 and *Aurum Fulminans* are, also, us'd to
 prove the Elasticity of the Air, produc'd
 by Rarefaction. The Air Gun also,
 sufficiently

ently evinces the elastic Force of the before compress'd Air, which is charg'd with a great Noise and a Force equal to that of Gunpowder. Various Experiments made on Air-Pumps, also, evince its Elasticity: Twelfthly, There is an Elasticity in the Air contain'd in Liquors, which discovers itself when the external Air is remov'd, and consequently the compressing Weight no longer acts: Thirteenthly, The Air is continually possess'd of its Elasticity which can never be destroy'd by any Means whatever. Many learned Gentlemen have indulg'd their Passions for Philosophizing, by endeavouring to account for this Property of the Air, by the Figure of its Parts, and the Action of the subtile ætherial Matter thereon. But as I esteem fabulous and trifling, whatever does not fall under the Cognizance of the Senses, I shall take no farther Notice of these uncertain Climæras, always confining myself to Facts, confirm'd by Experiments.

Fifthly, The Air is to be considered as an Aggregate of many and highly heterogeneous Corpuscles, and as containing in it the most minute Particles of all Bodies, which are mix'd with it, fluctuate in it, and are convey'd to it by Way of Exhalations, either in a humid Form as in moist Vapours, or a dry one by Way of Powder or Dust: On this Account some divide the Air into different Strata, each of which contains a certain Kind of Corpuscles, according to the Height at which, in Consequence of their greater or smaller Weight, they remain in it. Thus *Myndius* says, "The Constitution of the Air generally partakes of the Nature of the Soil. Thus in foggy Countries, Islands, and maritime Towns, the Sky is generally cloudy, and the Air heavy and thick; for the Atmosphere is full of a Redundance of Moisture

lodg'd in its Pores. But the Air about large and populous Towns, is render'd opaque by Smoke, or some other heterogeneous Particles. But among all the Bodies rais'd from the Earth or residing in the Air, the two most observable are Fire and Water: Fire is always equably distributed in it; hence the Air is said to be more or less cold; but in such a manner that the Air is the colder the higher it is, and the Increase of Cold, other Circumstances being alike, bears a Proportion to the Degree of Height, for it is colder in open Plains than in Vallies. Thermometers sufficiently manifest the greater Degrees of Heat in the Air. There is always Water in the Air, rais'd from the Waters of our Globe, by the Heat of the Sun, or the Influence of subterraneous Fire, by culinary Fires, by Frost, and especially by Winds: Thus Water may be rais'd to a great Height in the Air, which contains the largest Quantities, when it appears serene and dry, at which Time it is highest, and most dispers'd thro' the aerial Regions. Whereas the Air contains a smaller Quantity of Water when it appears moist and humid. And in this Respect the Air is distinguish'd into moist and dry: This Water in the Air, is the Matter of Dew, Clouds, Rains, Fountains, Rivulets, Rivers, Ice, Hoar-Frost, Snow, Hail, and perhaps Meteors depending on these. This Water also, constitutes the greatest Part of the Weight in the Air, but at the same Time diminishes its Elasticity. *Bontius* informs us, that the Air of the Island of *Java*, in the *East-Indies*, which might by some be thought dry on Account of its Heat, is nevertheless incredibly moist; for there in the driest Season of the Year, Iron, Steel, Brass and Silver, sooner contract Rust than in the most rainy autumnal Seasons in *Europe*, and that their Cloaths tho' carefully preserv'd in Chests soon become

become mouldy, and would easily rot if they were not expos'd to the Sun and Wind. The Presence of Water in the Air is evinc'd by exposing a fix'd alkaline Salt to a free Air apparently dry, by which Means the Salt is dissolv'd, has its Weight augmented, and may be again separated from the Water by Distillation. The different Quantities of Water contain'd in the Air at different Times, may be investigated by such Instruments as easily admit the Water into their Pores, by which Means they either swell and are expanded, are render'd tumid, or retorted, or increase in Weight. In the Summer when the Air is generally most dry, it is easy to perceive that it abounds with humid Corpuscles moving therein, especially from that Experiment made by pouring cold Wine or Ale into a Glass, or smooth metal Cup, by which Means the exterior Surface of the Cup as far as the Liquor reaches, is bedew'd with aqueous Drops which seem to be nothing but the aqueous Vapours floating in the Air, by the Coldness of the Cup condens'd into conspicuous Drops of Water. Other Bodies contain'd in the Atmosphere are the Spirits exhal'd from all Kinds of Vegetables, all Kinds of Oils, Salts, Earths, the Elements of Vegetables, and even their entire Parts, the *Sanctorian* perspirable Matter of Animals, their Excrements, all the Elements of Animals and their impregnated Eggs, and in the fossile Kingdom, Salts, Sulphurs and Metals. It is sufficiently obvious that these Particles are not always and every where the same in the Air; for the Nature of the Air is various, according as the Winds convey different Corpuscles to it from different Regions through which they pass, and is also vary'd by the Seasons of the Year, Inundations and Earthquakes; and thus Air on Account of the numerous Par-

ticles floating in it, is by some thought to be nothing but a Kind of lanuginous Mixture of Earth and Water, impregnated with Effluvia of all Kinds.

But the most remarkable Substance contain'd in the Air, is the universal Acid, with which Providence has taken Care plentifully to furnish it for many and those very important Purposes. The Existence of this Acid is manifest by its Effects; for by this all the baser Metals expos'd to the Air, are corroded. 'Tis this that neutralizes alkaline Salts if long expos'd to the Air. On this Account the Manufacturers of Nitre, prepare Beds of Earth which they impregnate with Animal and Vegetable alkaline Salts, which receive and retain this Acid in great Plenty; and they remark, that it is principally convey'd to their Strata of Earth by the Winds which blow from any Points betwixt the North and East. Now as these Winds are generally cold, it should seem that there is some Analogy betwixt Cold and Acids; and that this Acid of the Air is the grand Preservative against Putrefaction. The *Etesian* Winds, frequently mention'd by *Hippocrates*, are said to blow from the North-east, and to temperate the Heat of the Atmosphere. *Pliny* informs us, that the North-east Winds blow eight Days before the Dog-Star rises, and that these are call'd *Pro-dromi*, and that two Days after the Rising of the Dog-Star, the *Etesian* or North-east Winds set in and continue for forty Days.

According to *Prosper Alpinus*, the *Etesian* Winds begin to blow in *Egypt*, when the Sun enters Cancer, and blow very constantly the whole Months of *July* and *August*, as well as almost all *June*. At the Rising of these Winds, which happen nearly at the Time when the *Nile* begins to increase, all pestilential Distempers, which were before very common, while

while the contrary Winds blew, are extinguish'd; for, as he says, the southerly Winds which the *Egyptians* call *Campsin*, (as he supposes from *Cambyfes*, who with his whole Army was suffocated by the Sand driven upon them by these Winds, as we read in the Life of *Alexander* the Great,) induce a morbid and distemper'd Constitution of the Air. It is but natural to expect that the *Etesian* Winds which are directly contrary to them, should purge the Air and render it wholesome. Besides the Nature of the *Etesian* Winds is opposite to pestilential Constitutions, as much as the southerly Winds are observ'd to promote Putrefaction, agreeable to that of *Galen* in *Lib. 1. de Temp.* where he says, "That all Things are for a long Time preserv'd from Putrefaction by the North Wind which is cold and dry by Nature, but are very easily putrified by southern Blasts." And in many Places he affirms that the former Winds induce an healthy and salubrious State of the Air, as in *Com. in 3. Epidem.* "If the *Etesian* Winds," says he, blow in the Summer, they prevent many Mischiefs and Disorders, which otherwise would happen." And speaking of a pestilential Air he says, "If the *Etesian* Winds had blown at this Season they would have cleans'd the Constitution of the human Body from all Distempers." In several other Parts of his Works he assures us that the Summers in which the *Etesian* Winds did not blow, were very sickly. *Hippocrates*, also, when describing a pestilential Summer says, "The Summer was fair and hot, and the Season was very sultry, the *Etesian* Winds blowing only weak and by Intervals."

This Acid I take to be that vivifying Principle in the Air, which is so necessary both to animal and vegetable Life, that neither can subsist

without it. And it is, probably, the grand Instrument of the Destruction, and Dissolution of Bodies; so that it may be consider'd as the Scythe in the Hands of Time, which sooner or later destroys all the Productions of Art and Nature.

Sixthly, The Air is, also, to be consider'd with Respect to Motion or Rest; the Air is said to be at Rest when its contiguous Columns possess an equal Degree of Gravity and Elasticity; for then the Columns of Air press each other equally, and hence arises an Equilibrium and Rest. But when the contiguous Columns of Air are not in a State of Equilibrium then the most elastic or ponderous Column, presses and acts upon that which is less so: Hence arises that Agitation of the Air which we call Wind. And hence it is that after Showers when our Atmosphere is light, violent Winds generally succeed. As the Matter contain'd in the Air is brought to, or convey'd from different Parts, 'tis obvious that the Qualities of the Air may be greatly varied by the Wind. Hence 'tis evident that Winds may both bring and prevent Rains. The same holds true with Respect to Heat and Cold. And all other Circumstances being alike, another Change produc'd by Winds is to dry Bodies, by removing the Particles of Moisture from them. Thus *Bacon* tells us, "That all Winds have a greater Power of drying than the Sun, because the latter only raises the Vapours, but does not dissipate them, unless it is very hot; whereas Wind both raises and dissipates them." Hence in the eighth Chapter of *Genesis*, we are told, that after the Deluge, God sent Winds to dry the Face of the Earth. Hence the Reason is obvious, why in Autumn and Spring, Storms and violent Winds are generally more frequent than in Summer or Winter; for in the Autumn and Spring,

Spring the Vapours in the Atmosphere are more numerous, less dispersed, and less elevated; for which Reason the Elasticity and Gravity of the Atmosphere are less, according to what has been before observ'd. Hence it yields to the Elasticity and Pressure of the contiguous Column of Air, which rushes impetuously against the heated, rarify'd, and humid Parts of the Atmosphere, in order to restore an Equilibrium. After Winter when the Sun approaches nearer to the Æquator, the Air before condens'd by the Cold is more rarified, and Bodies evaporate more. Hence the Resistance of the Air is less, and by the Pressure of the contiguous Columns, Winds arise, especially such as blow towards the South, where the Rarefaction is already begun, so that at this Season northerly Winds are frequent. These are the principal and most generally assign'd Causes of Winds; but we are, also, to consider the State of the Land or Sea, in which they happen with respect to Vapours and Exhalations, as also the Situation of Mountains, by the Opposition of which the Wind acting upon them is repell'd.

From what has been said we understand the Reason why Winds blowing from cold Quarters, such as the North, render the Atmosphere cold; whilst those coming from a warm Quarter, as the South, render it warm; as also why Winds blowing from moist or dry Countries render the Air moist or dry: And why northerly Winds are cold, dry and generally more impetuous than the Southerly, which are hot and moist. A cold, dry, and condens'd Air, exerts the same Virtues with a ponderous Air, by pressing and propelling that which is adjacent to it, and by that Means inducing serene Weather. On the contrary, a warm and moist Air being rarified, and having its Elasticity weaken'd by the Hu-

midity, cannot long exert its Virtue, but yields to the Pressure and Resistance of the adjacent Air, and by that Means fills the Atmosphere with Moisture and instead of serene, produces cloudy Weather. The other Effects of Winds may be accounted for in like Manner. The Use of Winds is remarkably observ'd in large and populous Cities, where the copious Vapours and Exhalations render the Atmosphere vapid and putrid, unless by the Wideness of the Streets, the Winds have a free Passage thro' them. In Vallies, low situated and shady Places, the Air is, also, frequently noxious, because by the Intervention of Mountains and Woods the salutary Winds are excluded. Calm Seasons, tho' agreeable, are yet often productive of the most fatal Consequences; for during these, the Atmosphere depriv'd of its usual Ventilation, becomes putrid, and by that Means induces the most terrible and malignant Disorders. Hence in most Places on the western Coasts of *Africa*, these Calms are much more dreaded both by Sea and Land, than the most violent Storms. In the Island of *St. Thomas* immediately after the Winter Solstice, the Winds cease for two Months or more; by which Means most of the Inhabitants languish and die, unless grateful Winds blow seasonably to recruit their Spirits. In Ships long becalm'd, so many of the Sailors have died, that hardly a sufficient Number of Men have surviv'd to conduct the Vessels into the nearest Harbours. Unless the Ocean was agitated by Winds, its Water would prove not only fatal to the Fish, but the Air would also become mortal to Land Animals, on Account of the putrid Effluvia rising from it. The Agitation, therefore, of the Atmosphere seems no less necessary than the very Substance itself, to the Support and Preservation of Life, because

cause Winds purge the Air from the Impurities it has contracted, and, by a due Ventilation, correct that malignant Quality which it has acquir'd by Rest and Stagnation. But Winds blowing from all Quarters are not equally proper for purging the Air, for in our Hemisphere, the northerly Winds are most salubrious on Account of the abundant Acid they convey, tho' 'tis better to have any than none of them. Thus *Bacon* tells us, "That all Winds purge the Air" and free it from Putrefaction, so "that the Years in which Winds" are most frequent, are for that "very Reason most salubrious."

In the free and open Air there is, farther, a particular Virtue absolutely necessary to the Continuation of the Lives of Animals and Vegetables, for which Reason it is call'd the latent Support or Food of Life; for in a close Air which is not from time to time renew'd, neither Animals nor Vegetables can long protract Life. But this general Proposition admits of some Limitation; for some Authors of Candour inform us, that live shell Fish of a good Taste, Toads, Frogs and Serpents, have been found alive pent up in the Middle of Rocks, Stones, and other hard Substances. But these Instances are so few, and so much out of the common Course of Nature, besides the Chance of their being false, that they scarcely deserve being taken Notice of as Exceptions to the general Doctrine. There is something so extremely abstruse in this vivifying Principle in the Air, that the Learned have not yet been able to determine upon what it depends. For my own Part I believe, that a perpetual Supply of the universal Acid contain'd in the Air, is indispensably necessary for the Support of Animal and Vegetable Life; and that this Acid is the Ingredient in the Air, which constitutes the vivifying Principle, so

much taken Notice of, and is little understood.

From the Nature of the Air thus investigated from its Properties, Philosophers generally judge concerning the Causes of those Effects produc'd by the Air in the Change of Bodies; for as the Air is always in Motion, 'tis sufficiently obvious that it moves all Bodies, and as it is possess'd both of Fluidity and Gravitation, it presses upon all Bodies, tho' the Pressure is equable on all their Sides. The Air, also, keeps Bodies confin'd within certain Limits, for in an Air-pump, when the external Air is evacuated, Fluids rise over the Edges of the Vessels in which they are contain'd; because, some Portion of the Air has enter'd their Cavities or Interstices. Hence it continually makes an Attrition, Concusson, and Agitation on the Surfaces of Bodies, determines, applies, and excites their mutual Action upon each other. The Air, therefore, strangely mixes Fluids, especially the more it is agitated by Heat or Storms; but it does not change the Figures of Bodies, because it presses every where equably, unless when these Bodies contain some Interstices and Cavities free from Air, in which Case if they are flexible, it reduces them to a smaller Bulk. If the Air is at the same conceiv'd to be elastic, these Effects, will the more infallibly be produc'd. It is, perhaps, from the elastic Virtue of the Air, which penetrates our Bodies as well as other Substances, that we are enabled to sustain the immense Weight of the external incumbent Air, which is calculated to be equivalent to 39900 Pound Weight. As the Air contains the Particles of almost all Kinds of Bodies, so it will produce the Effects not only of Air as such, but also of the Substances contain'd in it. Thus it may be said to be an universal Seminary, rich in all Kinds of Materials, committing to the Earth those

those Elements of Bodies which it first receiv'd from it; and thus by a Kind of Revolution generating most Sorts of Bodies. And as the Corpufcules contain'd in the Air and perpetually in Motion meet with each other, they may produce the almost infinite Effects depending upon the Combination of their particular Virtues. On this Account in the Schools of experimental Philosophy, the Preceptors generally, with good Reason, begin their Courses with Experiments on the Nature of the Air. And the Teachers of Chymistry can hardly be said to do Justice to their Subject, if they neglect to treat of the Properties of Air, so that *Boerhaave* is unjustly censur'd by some for treating so prolixly of the Air in his Chymistry; for Air contains not only Water, but also saline, oleous, and other Parts. Hence it surprisngly affects and changes Bodies, promotes many artificial Effects, and by Means of the Corpufcules it contains acts as an universal Menstruum, by mixing, macerating, relaxing, dissolving, drying, corroding, putrifying and fermenting Bodies, according to their Condition, or Disposition to undergo particular Changes; for it seems sufficiently obvious, that according to the Commixtion, Reaction, and Exhalation of the various Salts in the Air, different Species of Salts may be generated. Thus the *Caput Mortuum* of Vitriol, when long expos'd to the Air, is again impregnated with its acid Salt. Calcin'd Alum, also, soon receives again its aluminous Salt into its Pores, and even exhausted Ores, when expos'd to the open Air, again produce their respective Minerals. Fix'd alkaline Salts, when expos'd to the Air become volatile. Pot ashes when long expos'd to the Air, are in a great Measure converted into a neutral Salt like vitriolated Tartar, or the Arcanum Duplicationum. Dew and Hoar-Frost by their

corrosive Virtue evince their Contents, which are also discover'd by a Chymical Analysis. Thunder and Lightning sufficiently denote the Existence of an inflammable Sulphur in the Air. Vegetables may, also, be produc'd in Places where the like Vegetables are not found, because their Seeds are convey'd by the Air to these particular Places. Minute Animals and Insects may also be produc'd in Places where their Parents are not to be found, but whose small impregnated Eggs have been convey'd by the Wind and deposited in other Places. From what has been said the Reason appears obvious, why in some a Ptyalism is induc'd by breathing Air impregnated with Mercury, especially in close Places or Stoves. It is remarkable, that Bodies defended from the external Air do not putrify. Thus *Le Mort. Lib. 1.* tells us, "That an Air-pump by extracting the Air prevents Corruption." This Circumstance seems to add considerable Force to the Opinion that the Air by its Action changes Bodies, by dissolving them, and putrifying such as are subject to Putrefaction. Thus every Body knows that the Putrefaction of such Bodies is prevented by anointing them with oleous and balsamic Substances, so as to prevent the Ingress of the Air, into their Pores. As the Air therefore on Account of its Contents, is vastly different in different Places; so we find that the same Experiments do not answer in all Sorts of Air. The Reason why many Mixtures and Solutions of Bodies do not happen in *Vacuo*, or in high and elevated Places, where the Air is light, is because the Pressure or Motion of the Air, is not sufficiently strong.

Hitherto we have considered the common external Air. With Respect to the internal Air, contained in our Fluids, 'tis certain, that being dispersed

fed and diffused, thro' the Humours of the human Body, it does not produce the Effects of true Air, which it cannot do till it is united in Bubbles, and if this was to happen, it would soon prove mortal. In chymical Distillations, the elastic Force of the Air, which is sometimes so great, as to break the Vessels, is owing to the Extraction and Rarefaction of the latent Air, in the Bodies subjected to this Operation. Bubbles of Air in Effervescencies are excited, whilst the Particles of one Body, entering the Pores of another, expel the Air lodged in them. In the Burning of Bodies, the Fire by destroying the Cohesion of their Parts, expels the Air, which is then united into Bubbles. In the Air Pump, when the external Air is extracted, the internal Air, by its Elasticity, exerts itself, is formed into Bubbles, and produces an Ebullition. Cold expels the Air from Liquors, because the external Air being condensed presses them, and forces from their Pores the Particles of the Air, which are then formed into Bubbles. The Air is discharged from boiling Liquors, by the Fire, which agitates, rarifies, and expels it. Fix'd alkaline Salts, discharge Air from Fluids, because admitting only the solvent Liquid, they exclude the Air lodg'd therein. In Fermentation the Air is excluded, by an Increase of Fire or Heat. In Putrefaction the Air is discharged by an Increase of Heat, disuniting the corporeal Parts of the Bodies, and so seperating their internal Air. The Effects of the *Papinian* Machine, in which, by the Help of Water, hard Bones are resolved, are in a great Measure owing to the Virtues of the Air expanded, pressing, moving, and agitating their internal Structure. The Force with which congealed Water, breaks the Vessels, in which it is contained, is owing to the Cold condensing the

Water, and expelling from its Pores the Air, which is formed into Bubbles, and makes a Resistance equal to the Pressure it receives. The Air lodged in the Aliments and swallowed with them, being rarified and expanded by the Heat of the Stomach and Intestines, by its Action, assists Digestion, in so far as it consists of a Resolution of solid Food.

The Physician who is careful to preserve Health, and cure Diseases, and who knows that Life cannot be supported, without inspiring the Air; may, from what has been said, understand the Effects of the Air, upon the human Body, and the Necessity of knowing how to direct these Effects prudently, and with Judgment; for he considers that the Air in general, as being possessed of Elasticity and Gravitation, insinuates itself into the patent Cavities of animal Bodies. Hence it is, that when new born Infants first dilate their Thorax, the Lungs, which were before close and compact, are distended, the Ramifications of the *Aspera Arteria* are so dilated, that there is a free Passage of the Air into the Vessels, at the Extremities of these Ramifications; as also of the Blood, thro' the minute Arteries, and Veins, which are interwoven with the Air Vessels, convey the Blood thro' the Lungs, and carry it to the Heart. And such a free Circulation is prevented, when the Lungs are either too much, or too little distended. The Ancients, conscious of the Necessity of Air, for the Support of Life, feigned *Æpollo*, meaning the Sun, to be the Inventor of Medicine; *Æsculapius*, that is the Air, to be his Son, and *Hygeia* or Health, to be his Wife, or according to others his Daughter. But it is certain from Experience, that all external Air is prejudicial to Wounds, which it changes, especially by drying them, preventing a laudable Suppuration, inducing a Putrefaction,

trefaction; and when it is confin'd by Means of a Plaister by insinuating itself into the fungous Parts, as the *Membrana adiposa*, and thus producing Emphysemas; and when rarified and expanded, in the Cavity of the Abdomen, a *Tympanitis*. Thus, also, when Wounds of the Cranium are uncovered, the Air mortifies the minute Vessels of the *Pericranium*, and the exterior Lamina of the *Cranium* is exfoliated. All Bones exposed to the Air become gangrenous; for which Reason the frequent Dressing of Wounds is discouraged by skillful Surgeons. So that in general it holds true, that the Air disposes to Putrefaction those Parts of the human Body to which it ought not to have Access; for *Ruyfch* informs us, that the Secundines may remain uncorrupted in the *Uterus* for two Years and longer, provided the Air has no Access to them; whereas they forthwith become putrid on the Access of this Fluid; hence common external Air, ought to have no Communication with any Parts of the human Body, except the *Epidermis*, the Air Vessels of the Lungs, and the first Organs of Digestion.

The Physician is, also, to consider the Air as subject to the Influence of two Kinds of Bodies; I mean the heavenly Bodies, and the Exhalations and Vapours arising from Bodies on the Earth. On the Aspect of the Sun, depend the Seasons of the Year, and Division of Diseases, made according to them into Vernal and Autumnal, those of the Summer and the Winter. Hence arose the astrological Medicine of the Ancients, according to which they erroneously and precepitately, ascribed all Disorders to the Stars. That the human Body is affected, according to the different Nature of Exhalations and Vapours, is obvious, from the Diseases of those who work in Metals, who with the Air inspire

the noxious Qualities communicated to it from the Metal. But the Air whether influenced by celestial or terrestrial Bodies, is either prejudicial or beneficial, according to its Heat, Coldness, Humidity, Dryness, Lightness, or Weight.

A too hot and scorching Air, by drying the Solids, dissipating the most fluid Parts of the Humours, and thus coagulating what is left in the Body, disposes to inflammatory, and nervous Disorders. And if the Air becomes so hot, as the Blood of a sound Person is, by the Thermometer, found to be, 'tis certain from Observation, that, in such an Air, Animals die. Hence it is, first, that by the Summer-Heats, Strength is considerably impaired, so that if the intense Heat was not tempered by alternate Colds, both Plants and Animals would soon be destroyed. Secondly, Hence it is that after the Dog-days, Disorders depending on some Indisposition of the nervous System often arise. To the Heat also of the Air it is owing, that in numerous Assemblies, inclos'd in close Rooms, with low Cielings, those of weak and delicate Constitutions, fall into Deliquiums, especially in the hottest Months of the Summer. From what has been said, we understand the Reason of many medicinal Observations. Why, for Instance, an intense Heat suddenly arising after violent Cold, produces Pleurifies, inflammatory Quinsseys, and sometimes Plagues; because by the Heat, the Blood is deprived of its most fluid Parts, and whilst the Vessels are dilated by the rarified Liquids, the thick Blood enters Vessels too minute, for its free Circulation. Hence, also we understand, why those who remain long in the Sun with their Heads uncover'd, are seized with burning Fevers; as also those who take long Journies in sultry Weather, as is often experienced by Armies

mies which suddenly move their Camps in hot Weather; for on such Occasions, Fevers generally prove highly fatal. This is often experienced by Travellers in *Asia*, where sometimes, almost the whole Caravan die of burning Fevers. Hence, also, we understand why intense Heat long protracted, produces Melancholy; for it is certain, from Observation, that in very hot Countries, vast Numbers of Persons, who in their Youth, were alert, brisk, and lively, after they are forty Years of Age, become hypochondriac, especially if they have used an hot Regimen; because the most fluid Parts of the Blood are dissipated, and the Remainder is consequently inspissated by the Heat. Hence, farther, we understand, why intense Heat succeeding Cold produces a spurious Peripneumony; because the Humours, especially of the pinguious Kind, being rendered stagnant by the Cold, and being resolved, by the succeeding Heat, enter the Mass of Blood by the absorbent Veins, and thus being convey'd into the right Ventricle of the Heart and pulmonary Arteries, produce the Disease.

Too cold and chill an Air, by shortening, condensing, corroborating, and increasing the Action of the solid Fibres upon the Humours, proves hurtful by inducing the Disorders arising from these Circumstances, such as Distillations, and Catarrhs; and a few Degrees of Cold greater than that which produces Ice on Water, congeals the Blood. *Stahl ad Harv. Cap. 27*, tells us, "that a cold Air produces one Effect on the Humours, which it thickens and inspissates, and another on the Solids, which by its Sharpness it stimulates to Contractions. *Hoffman* says, that "too cold an At-

mosphere compressed by piercing elastic Winds, such as those blowing from the North, renders Pains and Spasms more acute, and generates Coughs, Coryzas, Hoarseness, Rheumatisms, Catarrhs, and inflammatory Fevers; especially in Persons, disposed to these Disorders; we, also, observe that Relapses of intermittent Fevers, and arthritic Paroxysms, are often excited by northerly Winds." *Hippocrates* tells us, "that some intensely cold Bodies, such as Snow and Ice, rupture the Veins and excite Coughs." Cold Air to those of a sedentary Life is principally injurious, by generating the Scurvy; and if Persons have before been over-heated, it induces Asthma, Quinsies, Pleurisies, Peripneumonies, Gouts and Rheumatisms. Cold is, also, highly injurious to the Membranes and Nerves, in the smallest of which it produces Obstructions, which give Rise to Palisies. All the Disorders arising from Cold seem to proceed from a Contraction of the solid Parts, and hence inducing a Change in the Humours on which they act. Hence we observe, that Persons who in Consequence of the State of their Solids, have tender weak Constitutions, and lax or open Pores, are more subject to Diseases, rising from Cold than others. *Hoffman in Med. Rat.* tells us, "that the cold Air is principally noxious to those Parts of the Body, which have the smallest Afflux of Blood to them; such as the nervous and tendinous Parts, the Abdomen and Intestines, the Head and Brain, but especially the Feet, and more particularly the Soles and Toes, because these Parts are not only very tendinous and nervous, but also being at a great Distance from the Heart, have

“Blood circulating slowly thro’ them.” Among the *Spaniards* who indulge themselves immoderately in the Use of cold Liquors, Tumors in the Glands of the Fauces are very frequent; and from what Authors have observed it is sufficiently obvious, that this Effect may be produced by the Coldness of a Climate, as well as by cold Liquors; for it is observable that these Tumours of the Neck and Fauces, are more frequent in northerly than in southerly Countries. The frequent inflammatory Quinsies of Travelers, Couriers, Day-labourers and Huntsmen, are most frequently produced by the cold Air, or an adverse Wind rushing into the Organs subservient to Deglutition and Respiration. And Quinsies have sometimes happened to whole Armies, when they have suddenly remov’d their Camps and march’d against the Wind. *Petrus Bellonius de admirabili operum Antiquorum Praestantia*, L. 2. Cap. 10. speaks in the following Manner: “As for those who in passing the *Alps* have their Fluids so congealed, that they suddenly drop down dead, I affirm that this happens by the Inspiration of the cold Air; for the Body by the cold Intemperature of the Air, has its native Heat extinguished, so as to be congealed and as it were concreted. This is the Cause why Persons die so often in passing the *Alps*; their sudden Death is not, therefore, to be ascribed to the Snow, but to the cold Intemperature of the Air. Accidents of this Kind happen not only on the Tops of Mountains, but also in Vallies, Defarts, and Forests, as also on the Sea, because the Inspiration of the cold Air, by extinguishing the native Heat, puts an End to Life; but

“the most effectual Method of preventing such Misfortunes, is a violent brisk Agitation of the Body.”

Too moist an Air, when inspired, conveys too much Water into the Lungs, and is prejudicial to the Continuation of Life, by relaxing, resolving, and debilitating. Hence proceed the Disorders arising from an *Error Loci* enumerated by *Boërhaave* in his Institutions. If a moist Air is warm at the same Time, it is possessed of a putrefactive Quality, and is subject to generate the Plague. In a cloudy moist Air we observe, that Flesh soon putrifies; and that Oils are colliquated. By late Observations we learn, that the *Europeans*, who first settled in some Parts of *America*, were destroyed by an epidemical Kind of putrid Fever, which soon dissolved their Bodies; but this Misfortune happened principally to those who inhabited such Places as abounded with Trees and Shrubs; for in these Woods the Air was excessively moist, by the incredible Quantity of tepid Vapours exhaled from the Trees and Plants; but after all the Trees and Woods were burnt, and a free Air admitted to the Country, it became perfectly salubrious. A moist and cold Air generally excites intermittent Fevers, as also Palfies, Melancholy, and the Gout. Hence it is, that in the Winter, we perceive the Cold more intense in moist than in dry Weather, tho’ in the former, the Thermometer is lower than in the latter. Moisture relaxes the Vessels of the human Body, by which Means their Action upon the Humours is diminished, in Consequence of which, the true Cause of Heat in the Body will be soon weakened; whereas in cold dry Weather, the Vessels having their Elasticity augmented, act more forcibly on the Hu-

Humours, by which Means the Heat of the Body is the longer continued.

Too dry an Air is almost equally injurious, with that which is extremely hot, by drying the Parts of the Body. According, however, to the Observations of *Hippocrates*, dry Constitutions of the Air in general are more salubrious and less mortal, than such as are rainy. But in *Se&. 3. Aph. 15.* and *16.* he tells us, " that the Diseases which generally happen in rainy Seasons are long continued Fevers, Fluxes, Putrefactions, Anginas, Epilepsies and Palsies ; whereas in dry Seasons the Diseases happening are Consumptions, Inflammations of the Eyes, Stranguries and Dysenteries."

An Air which is too heavy, or too much compressed, is injurious to Health, by compressing the Vessels and their Contents, and consequently augmenting the Resistance made to the Heart, and by that Means producing a Kind of Suffocation.

Too light or rarified an Air is injurious, because by it the Vessels, being too little compressed, are too much dilated, by which Means the Humours rarify, and are derived to improper Places; and the Cause dilating the Lungs, being diminished, the contractile Force of the pulmonary Fibres is increased, and the Lungs themselves are not sufficiently dilated; hence, Respiration is stopped.

The other Causes inducing various Changes and Qualities in the Air, also, alter and affect the human Body, not so much by any Virtue peculiar to the Air itself, as by the Nature of the Corpuscles contained therein, whether these are the Vapours or Exhalations of the Place which it surrounds, or are conveyed to it by Winds from

other Parts. To these Corpuscles we are to refer the acrid, saline, corrosive, and various other Qualities of the Air, as is evinced by the corrosive Nature of Dew. Sometimes a cloudy pinguous and dusky Air lets fall to the Ground, a Kind of Dew in Drops, smelling almost like burnt Milk, and when it is received on a pure marble Floor, it moistens it, as if it had been anointed with Oil. Such an Air when drawn into the Lungs renders them unctuous and imperspirable. Hence arises Accumulations and Congestions of Matter in the Breast. I have already mentioned the Diseases of such as work in Metals, arising from an Air impregnated with the metallic Particles. But Health is principally affected by the excessive Heat, Coldness, Moisture, Dryness, Weight and Levity of the Air, when one of these States suddenly succeeds another; when, for Instance, an intense Heat and Drought succeed an excessive Moisture, or when a severe Cold succeeds an intense Heat. As is observed by *Hippocrates* in *Se&. 3. Aph. 1.* and *4.* These sudden Changes are the most immediate Causes of epidemical Diseases; for all the People inhabiting the same Place inspire the same Air.

The Motion of the Air is, also, to be considered by a Physician, since Air put into a Commotion, or Wind, exerts its Influences, whether noxious or salutary, more powerfully than Air in a State of Rest. By Wind, Cold is in a particular Manner augmented, and the Vapours penetrate more deeply into the human Body. Hence, we understand the Reason of the three following medicinal Observations. First, that those who being overheated, expose themselves to the Wind, greatly injure their Health. Secondly, that it is a prudent and

laudable Practice in Countries, where even in the Summer-Time there is a great Inequality in the Air, which is at one Time calm, and immediately after, in a violent Commotion, as in *Holland*, and other Places contiguous to the Sea, to wear more and thicker Cloaths, than in other Places, where the Temperature of the Air with respect to Heat and Cold is the same, but where there is a greater Constancy, and fewer Commotions in the Air. Thirdly, As in close Rooms, sick Persons of tender and delicate Constitutions are greatly injured by the smallest Cold, so we are to take particular Care, that the Air, tho' warm, be not put into any Kind of Commotion near them. Hence, also, we understand the Method of procuring a requisite Coolness to the Body, by Means of the Air, tho' it is not altered in its Temperature; that is by exciting a Wind or a Motion of the Air by Means of Bellows or Fans, or by a Fire opposite to an open Door or Window; for the adjacent Air rushes upon that which is rarified by the Fire, by which means a Wind is excited. This End may, also, be obtained by cold Water, falling from a Syphon or Pipe perforated with small Holes.

From what has been said the Reason is obvious why *Hippocrates* in *Lib. de Flat.* tells us, "that the Air is the principal and most considerable Agent in all the Changes and Accidents, which happen to the human Body." And why in *Lib. de Humoribus*, he says, "such as the Seasons are, such will be the Diseases." Thus also *Ramazzini* in *Constit. an.* 1691. tells us, "that such as the Air we inspire is, such is the Disposition of the Blood." Since then, *Hippocrates*, in *Lib. de Flatibus* asserts, that nothing contributes

more to Wisdom and Prudence, than a laudable State of the Blood, and since a good Air has such a happy Influence on the Blood, it may for that Reason, be esteemed the Source and Origin of Wisdom. It is agreed among Physicians, that the same Air is not equally proper for all Persons, whether in a State of Sickness or Health; for it produces a good or bad Effect according to the *Idiosyncrasy*, or peculiar Constitution of the Patient. Thus to Persons of a lax Habit of Body, a moist Air is more prejudicial than to such as are of a dry Constitution, to whom a dry Air is more hurtful than to those of a cold and lax Temperature. A warm Humidity is beneficial to melancholic Patients; and a dry and somewhat warm Air is serviceable in the Rickets, according to *Boerhaave*. Some asthmatic Patients are most injured by a dry and thin Air, but live more agreeably in a thick and moist Atmosphere, such as that of *Holland*. But Patients labouring under a nervous Asthma, require an emollient and relaxing Moisture of the Air, to make the too rigid Fibres of the Lungs perform their Functions the better. *Hoffman*, says, he was "convinced from long and accurate Observation, that those who labour under the Gout, arthritic Pains, or any other long and violent Disorder, as also under Fevers, and chronical Diseases, do not recover so soon when the Mercury is low in the Barometer, and a moist Intemperature of the Air has prevailed for a long Time; but as soon as a grateful Serenity returns, and the Mercury rises, there is a remarkable Change perceived in the Patients; for Transpiration and all the other necessary and critical Excretions are more expeditiously carried on, the Appetite is restor-

ed,

"ed, and the Sleep becomes sounder. "I have often observed in my Practice, says he, that all Kinds of Pains, such as Cephalagias, Gouts, and Tooth-achs, become more acute and intense, and in a Pleurisy the Respiration is rendered more difficult and laborious, if cold, dry, and elastic Winds have blown for a long Time and a perfect Serenity is observed. On the contrary, Patients labouring under a confirmed Phthisis, and intense Pains, an hectic, or spitting of Blood, live most agreeably in a cloudy, rainy, moist Air, nor are their Disorders so violent as when northerly Winds blow." Thus 'tis obvious, that different Airs are to be recommended according to the different Nature of Diseases. Thus for such phthical Patients, whose Disorder arises from an aced State of the Humours, the best Air is that of a Kitchen, which is impregnated with the volatile alkaline Salt of Fish and Flesh; whereas such Patients would be palpably injured by an Air, too much impregnated with an Acid, such as that arising from some Sorts of Wood, when burnt: Such Patients are not less injured by the acid Smoak of common Coal.

For the great Benefit, therefore, of Mankind, Methods have been invented of correcting those Qualities of the Air, which by their Excess induce Diseases. Thus a cold and moist Air, may be rendered warm and dry, by Means of Fires prepared of dry and aromatic Woods; by the Vapours of hot Aromatics exhaling either spontaneously, or by Means of Fire; by the Admission of a warm Wind, either natural or artificial. If, on the contrary, the Air is too hot and dry, it is to be corrected by the Exhalations from cold Plants immersed in Water, such as the Sallow, the Poplar, the Rose-

tree, Elder, and the Mulberry-tree. If the Water is to be dispersed by Means of Syringes, let it be mixed with a Solution of Sal-Ammoniac, in order to render it more refrigerating. The Egyptians, according to *Prosper Alpinus*, to prevent the Injuries arising from the intense Heat of the Air, live in the lowest Apartments of their Houses, in the Middle of which, they have Wells of cold Water, with which during the whole Summer they refrigerate the Air of their Rooms, and near which they generally sleep in the Night. They have also large Pipes or Tubes, for receiving the cool Air into their Houses. These vast Pipes, which are about ten Cubits in Diameter are carried up to the very Tops of their Houses, where they open with a Mouth resembling that of a Bell, towards the North, and convey the cool Air to the lowest Apartments. This Invention is by *Kircher*, also, applied to other Purposes, when for Instance, the Qualities requisite for Health are to be procured to the Air in an House, "Take, says he, a long Tube, which is to be so disposed, that the larger Orifice be secured without the Room, and the rest within it, then gently insert into the Tube odoriferous Flowers, such as Violets, Lillies, Thyme, Basil, and others of a similar Nature, so that the Wind blowing externally, may convey the Odour of the Substances contained in the Pipe, into the Chamber." The Air may be rendered moist and warm by the Evaporation of hot Water, as is directed in burning Fevers by *Boerhaave*. An acrimonious putrifying Air is corrected by burning Nitre or Gun-powder, by the Steam of Vinegar, or by throwing Salt on live Coals. These Things are of great Use in a pestilential Air, against which the Physician in visiting his Patients ought to guard him-

self by large Sponges, or Handkerchiefs dipt in Vinegar, and applied to his Mouth; that the Air corrected by the Vapour of the Vinegar, may pass thro' these into his Mouth, Stomach, Intestines and Lungs. The Ancients, in order the more effectually to consult the Health of their Miners, used to cloath them in leathern Sacks, and put lax Bladders upon their Faces. At present the Miners, especially those who work at Arsenic, wear glass Masks on their Faces. In all cloudy contaminated Air, 'tis proper to forbear swallowing the Spittle in the open Air; for the acrid noxious Particles of the Air, are by that Means easily conveyed to the Stomach and Intestines. For this Reason 'tis proper to use Tobacco in order to evacuate the infected Spittle. The Advice of Physicians is to be taken, with Respect to the most proper Measures for removing the antecedent Causes of a contaminated Air. Thus, if the Air is infected by stagnant Waters, these are to be conveyed elsewhere by proper Drains, or some other Methods. If the Air is corrupted by unburied Carcasses, Dunghills, or Excrements of any Kind, these are to be buried, burnt, or removed in some other Manner. Noxious Exhalations dispersed thro' the Air, are quickly dissipated by Fire, than which nothing purifies the Air more expeditiously and efficaciously. Thus we are told, that *Hippocrates* removed a Plague from Greece, by burning whole Woods. As the Vibration of the Air contributes greatly to its Renovation, so some Authors greatly commend the Ringing of large Bells in the Time of a Plague. Hence Birds, especially Sparrows, Hens, Peacocks, Ducks, and Storks kept tame in Chambers, are thought to purge and ventilate the Air by their flying, or the Agitation of their Wings. *Levinus Lemnius in Mir. L. 2. Cap.*

10. tells us, that the frequent Explosions of Cannons and Fire-arms contribute greatly to dissipate Clouds, and contagious Exhalations of the Air. But perhaps the Smoak of kindled Hay, before besprinkled with some Vinegar, may be a more effectual Remedy. In intemperate, unequal, and inconstant Weather, it is proper always to be equally clothed, and to avoid the Inclemency of the Air as much as is possible, by keeping within Doors. With Respect to the Signs of a corrupted, poisonous, or contagious Air, *Mindererus de Peste*, tells us, "that we may know such a State of the Atmosphere, when an Egg or Apple exposed to the Air for a Night, becomes highly putrid; or when new Bread, as yet hot, and erected in the Air on the Point of a Spear or Pole, and left for a Night, contracts a Kind of Putrefaction, becomes mucid, and requires such a noxious Quality, that it either cannot be tasted by Animals, or proves mortal to them when eaten. Such a Condition of the Air, may also be known, when the Birds drop down and die." From what has been said, 'tis sufficiently obvious, that the Air may be possessed either of salutary or noxious Qualities, according to the Natures of those Substances, whose Vapours and Exhalations are mixed therewith. The Health of the Public is, therefore, preserved, by taking care that in populous Places the Air be not polluted by Filth and Nastiness in the Streets, and by making proper Regulations for Soap-boilers, Tanners, Dyers, and Candle-makers. Cleanliness was for this Reason strictly enjoined the Jews in their Camp, as we are told in *Deuteronomy, Cap. 23. V. 12, 13, and 14.* And upon this Subject many excellent Treatises have been written. The Reason why a Person who has lived long

long in the bad Air of a public Hospital, is sometimes indisposed upon his coming out of it, seems to be owing to the Weight of the Air, or the Exhalations therein which he was accustomed to; for according to *Hippocrates in Sect. 2. Aph. 50.* a Man us'd to an impure Air, cannot bear a better so well.

From what has been said, I think it appears rational to advise the Change of Air, that every Individual may enjoy one suited to his State, Temperament, and Condition.

I have before observed, that an Air close and long pent up, is highly prejudicial to the Continuation of the Lives of Animals; for when long free from all Ventilation, it assumes so pestilential a Quality, as in a Moment to prove mortal to such as rashly expose themselves to it. Thus many by opening Caves and subterraneous Places, which have been long closed, have been forthwith destroyed by the poisonous Air, discharged from them. Hence 'tis obvious, that the Air only by Stagnation, without any foreign Contagion may not only prove useless, but destructive of Life. The Cause of this, *Boerhaave* in his *Instit. Med.* thus gives: "Air, when not frequently renewed, becomes mortal, not on Account of its Heat, Rarefaction, or Density, but on Account of another more latent Cause, which is perhaps the Destruction of its Elasticity, or of that Principle which the Alchymists call the Aliment of Life." *Vossius* says, that "the vital and animal Spirit, is not generated of Blood alone, but has also Air mixed with it, nor could it subsist, unless it received Nourishment from the external Air. But 'tis a childish Error to imagine that the Air we expire is always exactly the same with that we inspire; for a Portion of it remains within, in order to nourish the

"Spirit, as being a Substance most similar to it; and the Air that is expired is no longer pure, but has reeking Vapours mixed with it." 'Tis certain, that in large Assemblies of People pent up in low close Rooms, such as have weak and delicate Constitutions, fall into Deliquiums, but find Relief in a free and open Air; for it seems probable that when Animals inspire the same Air, which they have not only often expired, but which is also contaminated by the Exhalations perspiring from the Body, such an Air is too light for expanding the Lungs sufficiently, and promoting the Circulation of the Humours. This Doctrine seems to be confirmed, by that Property of Fire, whereby it continues to burn so long as it has the free and open Access of the compressing Atmosphere, but when such an Air is removed, and only the Air expired from the Lungs, is applied to a burning Candle, it is immediately extinguished, but again immediately blown up, by Air collected in the Mouth before it reaches the Lungs. That an Air remaining long without Renovation is contaminated with Exhalations noxious to Health, is sufficiently experienced, also, by those who are frequently near the Beds of sick Persons, especially those labouring under burning Fevers; for those who constantly attend such Patients, have their Eyes and Lips inflamed by that Means. In close Places, such as Prisons, in which many are confined, a highly malignant Species of Scurvy often rages. In public Hospitals, where many lie sick at a Time, Apostems and malignant Ulcers are generally produced by the putridinous Exhalations. Hence appears the Necessity of preventing these Accidents, by the Renovation of the Air. Thus in Prisons, Holes might be made in the Roof or Walls, for removing the old, and bringing new

Air in its stead. Pure and fresh Air may be admitted to sick Persons, by opening a Window for a little Time, whilst the Curtains of the Bed are closed, and then shutting the former and opening the latter. In the closest Places of Ships, where the Air is tainted by the Exhalations of the Men, the Sailors wash the Floors, and sprinkle them with Vinegar, or pour Vinegar into Iron Vessels heated red hot; but the best Remedy is certainly the Expulsion of the old, and Introduction of fresh Air.

With Respect to that Question, what Kind of Air, in general, is most fit for the Preservation of Health? *Boerhaave* in *Instit. Med.* says, "that Air is best for the Preservation of Health, which is serene, heavy, temperately warm, and dry, which blows from pure Mediterranean Regions, and Rivers; which is agitated by a gentle Wind, free from violent Commotions, unconfined, rural and defecated from saline and oleous Exhalations;" for a pure serene and temperate Air preserves the contractile and expulsive Motion of the Solids entire, and communicates a due Tone and Strength to the Fibres; for it neither too much constricts nor relaxes the Pores and minute Vessels, nor does it resolve and attenuate the Compages of the Fluids, nor induce a Lensor; but rather preserves a due Mixture and Temperature of them. As a pure and temperate Air is of so great Importance to Health, the Reason is obvious why elevated Places, especially those lying exposed to easterly Winds, and Country Habitations, are so beneficial to valetudinary Persons; for high Situations have a thin and pure Air, because they are more frequently exposed to the Wind, and the Impurities of the Air are by that Means dissipated. But no Place is

more proper for living in, than a Plain, or the gentle Declivity of a small Hill, where the Soil is barren and gravelly, not fat and bituminous, and consequently less fit for the Purposes of the Husband-man.

All other Circumstances being alike, we generally perceive ourselves more cheerful and brisk, when we remove from large and populous Towns, to Country Places, because in the latter we inspire a purer Air, which promotes a free Circulation of the Blood; for it is more ponderous, elastic, and when inspired, impels the Humours more thro' the Vessels; whereas the Air in Towns being impregnated with Vapours and Exhalations, more light, less frequently renewed, and less elastic, is, for these Reasons, less favourable to the Circulation of the Humours. Hence also we understand the Reason, why we enjoy not only a freer Respiration, but also a more cheerful Temper during the Winter, in a Room heated with a Fire in a Chimney, because then the Vapours and Exhalations are carried up the Chimney, and the Air is constantly renewed, than in a Room warmed with a Stove, as is customary in the northern Countries, where the Vapours cannot be discharged, nor the Air renewed, so that Respiration must be performed in too close, vapid and light an Atmosphere. *Vossius* justly observes, that every Animal, when the Air is suited to its Nature, testifies its Joy either by some particular Motion, such as leaping, running, and flying, or by its Voice; so great is the Influence of the Air in rendering Life grateful and agreeable. And *Virgil* long ago seems to have been abundantly sensible of this Influence of the Air, when speaking of the Change of Weather prognosticated by the Behaviour of the brute Creation, he says:

Non

Non equidem credo, quia sic divinitus illis
Ingenium, ant rerum fato Prudentia major.
Verum tibi Tempestas, et Cæli mobilis Hu-
mor

Mutavere Vias, et Jupiter humidus Austris,
Densat erant quæ rara modo, et quæ densa,
relexat,

Vertuntur Species Animorum, et Pectora
Motus

Nunc alios, alios, dum frigora Ventus agebat
Concipiunt; hinc ille avium Concentus in
Agris,

Hinc læti pecudes, et Ovantes Guttore Corvi.

Those who intend to practise Medicine, ought to remember, that we have before evinced that the good or noxious Qualities of the Air, are applied to the human Body in three Manners; that is, by Inspiration into the Lungs; by its Admixture with Aliments; and externally upon the Surface of the Body, and the Vessels distributed upon it; for a Knowledge of these, enables them to direct the requisite Effects, and remove the Injuries to be apprehended from the Air. Hence we may, perhaps, conclude that the Air produces greater Changes in the human Body, than Aliments, since the last do not affect us in so many different Ways. The Physicians of the methodic Sect, who maintained that all Diseases arose either from Stricture or Relaxation, were more careful in the Choice of Air for their Patients, than of Meat and Drink; because the Air being either hot or cold, may proportiona-

bly relax or constrict the Body. As another Reason for their Conduct they also said, that Aliments were only taken at Intervals, whereas the Inspiration of the Air was continually necessary.

With respect to the celebrated Question, whether the external, heavy and elastic Air, during Inspiration, penetrates the pulmonary Vessels, and mixes with the Blood. *Boerhaave*, thinks that it does not; but seems to be of Opinion, that something passes from the Air-Vesicles in the Lungs to the Pulmonary Veins. This *something* I take to be the vital Principle in the Air so often taken Notice of above, and which is so necessary to the animal Oeconomy, that all Air divested of it by repeated Inspirations, is no longer capable of supporting Life, without a perpetual fresh Supply. And this, there is great Reason to believe, is nothing but the pure ætherial Acid of the Air; and 'tis possible, that the Elasticity of Air may depend entirely upon it. This however I mention as a Conjecture, and as a Subject which highly merits farther Examination.

Thus having considered Air as a principal Instrument in natural and artificial Chymistry as well as in every Part of Pharmacy, and as a Non-natural; I proceed to Water, another very important Agent in the Combination and Dissolution of Bodies.

CHAP. II.

Of WATER.

WATER, according to the celebrated *Boerhaave*, is a Liquor highly fluid, inodorous, insipid, pellucid, without colour, and which

in a certain Degree of Cold, is condensed into a brittle, hard and vitreous Substance, commonly called Ice. Its Weight is to that of Air as 1 to

859. It is heavier than all Wines and Malt Liquors, than the Spirit of Wine, and Oils of Olives, sweet Almonds and Turpentine; but 'tis almost sixteen times lighter than quick Silver, and considerably lighter than Spirit and Oil of Vitriol, the Spirits of Nitre, Salt, and Sulphur, Aqua-Fortis, Vinegar, distilled Vinegar, the Milks of Cows, Goats and Asses; Whey, Urine, and Oil of Tartar.

So great is the Fluidity of Water, that by the smallest Heat or Motion, its minutest Parts recede from each other, and 'tis far from being improbable, that in Lakes apparently stagnant, it retains a perpetual, tho' imperceptible Motion on Account of the insensible Undulations of the Air.

The constituent Particles of Water being so small and minute as to escape the Sight, even when assisted by a Microscope, render it capable of penetrating into the invisible Pores and Interstices of many Bodies, into which Air has no Access; and tho' tis specifically heavier than Air, yet it may remain in it, and be raised to a considerable Height, just as Earth, which is also heavier than Air, is suspended in it under the Form of Dust. Hence 'tis obvious, that the Water contain'd in the Air will enter these Bodies, into which the Air itself penetrates. The more pure and free from a Mixture of heterogeneous Particles the Water is, the greater Quantity of it will be exhaled, whereas the more Salt it has absorbed the less of it will be evaporated.

Notwithstanding what has been said, there are some Bodies which do not transmit Water thro' their Pores, such as Metals, Flints, hard Stones of all Kinds, Gems, Glass, some Woods of a compact, hard, ponderous and resinous Nature, China Vessels, and well polished Substances. Those Bodies into whose Pores Water cannot enter when cold, also remain

impenetrable to it when agitated by Fire, and pressed with a great Force, unless the Parts of the Vessel in which the Water is contained should recede from each other, and suffer it to pass thro' its Pores. Hence 'tis sufficiently obvious that the highest Force of Fire cannot divide the Elements of Water into smaller Parts, but is only capable of extending them to a greater Bulk, and of agitating them strongly with each other; for by the Absence of Fire, or rather its Diminution by Cold, the Particles of Water seem to be contracted, whilst they are concentered into Ice. This Contraction of the Elements of Water cannot be sensibly observed, because the Air expelled by a strict Union of the contracted Elements of the Water, begins to form elastic Bubbles, which more dilate the Ice than it is diminished by the Cold. 'Tis observed by Bricklayers and Plaisterers, that the colder Water is, the more effectually it penetrates Walls; for Water is more condensed by Cold than Stones, for which Reason the Pores of Stones are less contracted by Cold, than the Particles of Water, so that excessively cold Water can pass thro' Pores thro' which warm Water cannot be conveyed. Hence we may infer, that the component Parts of Water are by no Means compressible, but unchangeable in Figure and Bulk, and are probably small Spheres finely polished.

Water contained in the Pores of those Bodies into which it has penetrated, augments their Weight in Proportion to its own. Hence we discover the Frauds of some avaricious Traders who preserve their Goods in a moist Place, or buy them dry in order to sell them in wet Weather. Besides, the Water which insinuates into Bodies, enlarges their Bulk without destroying their Figure. Hence, dry Bodies into which Water insinuates itself, are changed by it. Thus wooden Vessels when dried

dried, have Chinks which admit Water, tho' the same Vessels when moist no longer suffer any to enter. In the Night-time when Storms arise, People often are alarmed at the Cracking of Houses, so much as to be apprehensive of Thieves on that Account, whereas this Effect is produced by the moist Air, insinuating itself into the Parts of the Wood, and forcing them to recede from each other. The Strings of musical Instruments, prepared of the Intestines of Animals, are rendered more tense by the moist Air expanding them. Water insinuating itself into some Bodies only gently coheres with them, and is again separated from them, whereas it is firmly concreted with others. Hence, wooden Chests, and the Doors of Houses, which in wet Weather are firmly shut, in a dry Season open spontaneously, on Account of their Contraction, after the Expulsion of the Water. On the contrary, every dry Salt, only by a violent Fire yields Spirits by Distillation, from which the Water is separated by Rectification, and sometimes by Means of an alkaline Salt. The same holds true with Respect to Sulphur distilled into a Spirit. After Water has insinuated itself into other hard Bodies, it adheres so intimately to them, as not to be perceptible, tho' at the same Time it constitutes a Part of such solid Bodies; as is obvious from dry quick Lime after the Expulsion of the Moisture in Calcination. This quick Lime by an Affusion of Water, is reduced into a ductile Paste, consisting of Water, Sand and Lime, which being dried, becomes hard like a Stone, and yet this Hardness depends intirely on the Water contained therein; but when expelled by the Fire, the Elements of the Lime no more cohere with each other. Water, also, concretes with the

most hard and solid vegetable Bodies, as is obvious from the Distillation of *Guaiacum* made by itself. The hard and driest Parts of Animals, by Distillation, yield a volatile Spirit, which contains a large Quantity of pure Water. Hence 'tis obvious, that Water enters the Composition of many Bodies and proves the strongest Gley or Cement, by which their Parts adhere to each other. 'Tis also equally obvious, that the solid Parts of the human Body, derive their Texture, from the glutinous and adhesive Quality of Water.

There are Bodies which Water not only penetrates, but also dissolves, in such a manner as that equal Qualities of such Bodies are equally distributed thro' all the Parts of the solvent Water. All Salts whether in a liquid or solid Form, are, according to their Natures, more or less dissolved by Water. Water in a Commotion always dissolves a larger Quantity of Salt, and more expeditiously, than that which is at Rest, and warm Water more than that which is cold; so that the hotter the Water is, the more Salt it dissolves and retains; whereas the colder it is the more of the dissolved Salt it lets fall; so that during intense Frost, the Salt is almost entirely expelled from freezing Water. This is the Reason why Sea-water is not so easily converted into Ice, as fresh Waters; as also why it is more salt in hot, than in cold Climates. It seems to be sufficiently certain that Water, entirely destitute of Heat, which is the coldest of Ice, can dissolve no Salt. The same Quantity of Water dissolves one Salt more quickly than another, and more of some than of others. 'Tis also observable, that the Water which has dissolved as much of any given Salt as it possibly can, so that if

any

any more of the same Salt is thrown into this *Lixivium*, it remains undissolved at the Bottom, may yet dissolve a large Quantity of another Salt, when thrown into it, without separating the Salt which was first dissolved, from the Water. From some Salts, when dissolving in Water, arises Cold, from others Heat, and from others neither Cold nor Heat. Thus Cold is excited by Nitre, Borax, Sea Salt, Vitriol, Verdigrease, Alum, Rhenish Tartar, Cream of Tartar, volatile Salt of Urine, and all alkaline volatile Salts. But among all Salts, the greatest Cold is excited by Sal-ammoniac. Heat is produced by common brown Sugar, by Salt of Tartar, Aqua-Fortis, Spirit of Sea Salt and Spirit of Nitre; but the greatest Heat is produced by Oil of Vitriol. Neither Heat nor Cold is produced by dissolving in Water, Oil of Tartar per Deliquium, the recent Urine of a sound Person, Vinegar, and previously putrified human Urine.

Water, also, dissolves *Alcohol* of Wine, if strongly shaken with it; but if it be gently poured to the Alcohol, it passes thro' it, and subsides to the Bottom, the *Alcohol* swimming above. But it does not very soon dissolve the Alcohol which after Conquassation, fluctuates thro' the Water in a Kind of pinguious *Stria*, tho' it is at last equally distributed thro' the whole Water. Now as *Alcohol* is a pure Oil of Vegetables, which by the Efficacy of a due Fermentation is changed into the Nature of Spirits, which deslagrate in Fire, and mix with Water, we know, that Oils themselves, thus previously changed, may be also perfectly mixed with Water, tho' this happens the sooner and the more easily, if they have been before diluted with a small Quantity of Water, for com-

mon Spirit of Wine which contains much Water, is more easily mix'd with Water, than the purest *Alcohol*. When Water is mix'd with pure *Alcohol* rectified by itself, the Mixture produces Heat with an Effervescence. The same also happens with common Spirit of Wine, tho' in a smaller Degree; but with alcalized Spirit of Wine the Heat is less, and the Effervescence none at all. But with Water entirely saturated with dissolved Salts, such as Oil of Tartar per Deliquium, for Instance, *Alcohol*, cannot be mix'd by Shaking or Ebullition, for the *Alcohol* always appears uppermost. But even in this Respect there is a Difference between Salts; for if the Water be richly impregnated with any Salt which easily suffers itself to be separated from the Water, such as that of *Epsom*, for Instance, then the *Alcohol* will be united with the Water pour'd to it, and the Salt disengag'd from the previously solvent Water, will be precipitated to the Bottom of the Vessel. If Water is mix'd with *Alcohol* in which a distill'd Oil is dissolv'd, it forces the Oil from the *Alcohol*. Water also separates any Refin, as also Camphire, which has been previously dissolv'd in *Alcohol*.

Water also dissolves all Soaps compos'd of Oil and alkaline Salts, or all saponaceous Bodies, by which Means a Mixture is produc'd capable of dissolving some Substances, which Water alone cannot dissolve; such as Oils, oleous Substances, Resins, resinous Substances, Gum-Resins, and tenacious Bodies compounded of them. Hence the Power of Water to dissolve Bodies, is much increas'd by the Virtues of Soap. And hence the Method of rendering Oils capable of mixing with Water is sufficiently obvious.

Water alone is capable of dissolving essential Oils, if these are before duely mixt with pure *Alcohol*, by
Means

Means of Digestion and repeated Distillations.

Water also dissolves sulphureous Substances united with those of an alkaline Nature, as also Balfams, Colophonies, and Refins, if they are first united with alkaline Substances. Water also dissolves the Air itself, and receives into its Pores a certain Quantity thereof, which does not act as Air so long as it remains in these Pores. The Air contain'd in Water is sufficiently discover'd by its Ebullition, when the external Pressure of the Air is remov'd from the Surface of the Water, by Means of an Air-pump. Since, then, Air contains Bodies of all Kinds, hence 'tis obvious that these must also with Air be convey'd into the Pores of the Water.

Water is, also, capable of dissolving many terrestrial Bodies, if they are first thoroughly corroded in their proper Acids. Of this Kind, are Oyster-shells, the Shells and Claws of Crabbs, Shells of Snails, Shells of Fishes, whether of the Sea or River kind Stones, and stony Concretions, Horns, Bones, and Hoofs of Animals, Chalk, Pearls, Mother of Pearl, calcin'd Stones and Flints. But as these terrestrial Bodies corroded in their Acids become dissolvable in Water, so on the contrary alkaline Substances intimately united with Earth, cannot afterwards be dissolv'd in Water, as may be instanc'd in Glafs; and the highly subtil and volatile alkaline Salts of Animals intimately united with Earth, constitute a Mass which can by no Means be dissolved by Water. But Water is the most powerful Solvent when rais'd in Vapours by Means of Fire, as is evident from that Species of Calcination which is term'd *Philosophical*.

There are, however, some Bodies which cannot be dissolv'd by Water, such as pure Earth, entirely destitute of foreign Salts, and free from the least Admixture of every sulphureous

Substance; as also Glafs, Gems, Crystals, entirely simple Stones, and several other Bodies of a similar Nature. To these we may add Metals; because the Solutions of Metals said to be made by Water, seem to be produc'd rather by the Salts contain'd in the Water, than by the Water itself. Water, farther, cannot dissolve Oils, Refins, Balfams, Colophonies and Sulphurs, unless they are mix'd with some other Bodies; for which Reason, Bodies cover'd with these Substances do not admit Water into their Pores. In many Cases the solvent Force of Water is increas'd, according as its Heat is augmented, and its solvent Power is diminish'd in Proportion as its Heat is lessen'd. But in other Solutions made with Water, the contrary holds true; for some Bodies are dissolv'd in tepid, but are indurated in boiling Water, such as the White of a new laid Egg, the Serum of the Blood, and some other Substances.

Since Water, in Consequence of its solvent Quality, may contain many other Bodies in such a Manner as not to appear, but to constitute in Conjunction with it an aqueous Fluid call'd Water, hence we see the Absurdity of those who undertake to treat of Water as a pure Fluid perfectly separated from every other Body; "For, according to the celebrated *Hoffman*, there is not to be found in Nature, any Species of Water, which does not contain something of a dry and solid Nature; for in every Water, however often distill'd, there is always something dry and solid found in the Bottom of the Vessel. This is obvious to the Eye, when the purest Water is frozen; for upon its being thaw'd, a certain gross and earthy Portion subsides to the Bottom of the Vessel." Hence 'tis, also, farther evident; first, that the Virtues and Effects of Water of-

ten depend upon its Contents. Secondly, that these Virtues are various according to the Substances mix'd with the Water. Thirdly, that one Water differs from another with Respect to the Bodies with which it is mix'd, and that one Water may be said to be purer than another. Fourthly, that it is alter'd or chang'd with Respect to its Fluidity, Smell, Taste and Transparence, by the Bodies which are mix'd with it. And Fifthly, that the Weight of Water is various according to the Bodies contain'd in its Pores; for in Water there are many Substances contain'd, which are lighter than pure and simple Water; this is principally obvious in rain Water and those rais'd in chymical Vessels. There are, however, many more Substances, which are naturally heavier than Water, that mix therewith, insinuate themselves into its Pores, and consequently render it heavier than it would otherwise be.

Since, therefore, Bodies both naturally lighter and heavier than Water may be mix'd therewith, it may seem to be an Error to call that Water purest which we find to be lightest. But 'tis to be observ'd, that in considering natural Water, if we except rain Water, which tho' lighter than other Waters with which the Bowels of the Earth supply us, yet abounds with many heterogeneous Particles, and some mineral Waters impregnated with a large Quantity of ethereal Principles, which at the Fountain-head are lighter than common Water, but become heavier when carry'd to a Distance from their Springs, in consequence of the Loss of their spirituous Parts, yet the Goodness of other Waters may be estimated from their Lightness; because, the Water lodg'd in the Bowels of the Earth receives into its Pores, such Bodies as are heavier than the Water itself; whereas Rain

Water, which is rais'd in the Air, admits more light and volatile Bodies; and mineral Waters at their Fountain-head containing an highly subtile *Æther*, are more rarified, and consequently contain less Matter under the same Bulk. The Weight of Water is therefore to be examin'd in order to know which is most light, and consequently most pure and salubrious. *Sanctorius* orders us to investigate the specific Gravities of different Waters, by weighing some heavy Body in them, because a Body gravitates most in that which is purest and lightest. But the Moderns have invented many more accurate Methods of investigating the Weight or Lightness of Waters, which are now generally known: But 'tis to be observ'd in all statical Experiments, that the different Degrees of Heat vary and change the Weight of the same Water; for in Summer all Water is rarified, and consequently lighter than in Winter, when condens'd. That Water is, also, lightest which boils soonest, whereas that is more heavy which requires a longer Time. And that, also, is the lightest, which cools the soonest.

Besides the Lightness of Water, there are, also, other Tests of its Purity. The most considerable of these is, to dilute a Solution of the purest Silver, made by Aqua Fortis, in the finest Water that can be had; for if the Water to be tried is pour'd into a clear Glass, and some of this Solution dropt into it, without rendering it turbid, opaque, or whitish, such a Water may be concluded pure, for nothing can be contain'd in them, except Spirit of Nitre or Aquafortis. Thus, also, if Oil of Tartar *per Deliquium*, well diluted with Water, is drop'd into the Water to be try'd, without inducing any Alteration in the Colour, we are sure nothing is contain'd in it, except an Alkali, for if an Alkali only should be in it, no

Perturbation or Change of Colour will be produc'd. But nothing discovers the Impurity of Water sooner than a Solution of Sugar of Lead made with the purest Water; for a very few Drops of this soon discovers the heterogeneous Contents, by rendering the Water instantly turbid. The Antients have, also, handed down to us several Signs, by which to judge of the Purity of Waters. Thus 'tis esteem'd good, if it leaves no Stain when thrown upon a brass Vessel; if no Sand or Mud subsides in the Bottom of a Vessel, in which it has been boil'd, when it is pour'd out, after it has been in a State of Rest for some Time; if Pulse boil'd in it are soon reduc'd to Softness; if no Moss nor Rushes grow in or near the Channels where it flows; if it produces in such as drink it no bad Colour, blear'd Eyes, nor Inflammations of the Gums; if it is clear and tasteless; if it readily dissolves Soap, and cleanses Linen from Dirt; if it nourishes good and salubrious Fish, and if it makes good Mortar for the Purposes of Building. To which may be added, if it extracts good Tinctures from Bodies infus'd in it, as from Tea. From what has been said, 'tis sufficiently obvious, that Waters assume different Natures and Qualities, from the Places where they rise, the Soils thro' which they flow, or in which they continue, and the Air to which they are expos'd; and that these different Qualities depend on the heterogeneous Parts with which they are connected.

In order to discuss that important Question, What Species of Water is most useful in common Life? we shall separately consider each of what we commonly call the sweet and simple Waters, beginning with Rain Water.

Rain-Water, then, is a Water distill'd by Nature, for by the Heat of the Air, it is elevated from the Sur-

face of the Earth, to such a considerable Height, as no chymical Distillation can possibly imitate. So that it may truly be said to be the *Lixivium of the Atmosphere*, in which all the various Species of Corpuscles, fluctuating in the Air, are collected. Hence 'tis obvious that there are Variations in rain Water, not only according to the Diversity of the Soils and Climates, but also with Respect to the Seasons of the Year. Thus the vernal Rains are considerably impregnated with mix'd Bodies, which the Cold of the Winter had retain'd in the Earth, but which the Heat of the Spring resolves, disperses thro' the Air, and mixes with the Rain. Hence Spring Rain Water is much fitter than others for some Operations, which in order to render them perfect, require that Force of Water which does not depend upon the Water itself, but upon the Matter which is mix'd with it, as is sufficiently obvious from Fermentations and the Vegetations of Plants; for this Reason it is, that *March Water* is so much celebrated by some. Since, then, Rains vary according to the Constitution of the Air, which is contaminated with more or less foreign Bodies, we may hence judge whether all Rain Waters are good for the Purposes which are excellently answer'd by some.

The most impure Species of Rain Water is that which falls during intensely hot and windy Weather, in populous Cities, and low situated and fetid Places, where the Parts of Animals, Vegetables, and other Bodies are daily and copiously dispers'd thro' the Air, by Reason of the great Multitude of Inhabitants. And the Rain-water will be still worse, if the Air is foggy, and of an ill Smell. Some Rains are observ'd to fall suddenly after violent Claps of Thunder, and these, if collected in clean Vessels, yield a Froth, which seems

to contain something like an highly subtil nitrous Salt. Some Rains falling during violent Tempests, have been observ'd to be highly fetid, and in twenty-four Hours to generate Worms in the Cloths they fell upon.

Upon considering all the Waters which fall from the Atmosphere, that of Snow has been found the lightest, and the higher it is carried into the Air, the more it is depurated from its gross Parts in its Descent. If an intense Cold has form'd Water elevated to a great Height, into Flakes of Snow, especially after a Series of serene and dry Weather, and if such a Snow falls upon a barren sandy Soil at a great Distance from Towns and Cities, it will be as pure as it can be made either by Art or Nature; for it will hardly contain either Salt, Air, Oil, or any other Substance. The Water of Snow is unchangeable, may be kept for Years, and is an excellent Remedy for Inflammations of the Eyes. Tho' some are of Opinion that Rain-waters, in Consequence of their Lightness, Purity, and Transparency are of all others the best, especially for medicinal Purposes, yet *Hippocrates* in his Treatise of Air, Water, and Situations, tells us, "That they must be boil'd and purified, otherwise they have a bad Smell, and produce Hoarseness in those who drink them." But he absolutely condemns Snow and Ice-water, tho' some modern Physicians admit the Use of them, when the Snow is pure and not contaminated with earthy Sordes, when the Stomach is overheated, and stands in need of a Cooler, tho' they must not be us'd where there is a scorbutick Cachymy, or any Disorder of the Viscera. What is said of Snow-water may be, also, applied to that of Hail.

Spring or Fountain-water, it is said, derives its Origin from that of Rain, whilst the aqueous Vapours e-

levated from the Earth and dispers'd thro' the Air, striking upon cold and high Mountains, are condens'd into Drops, from a Collection of which flowing down the Sides of these Mountains, Water is produc'd in some subterraneous Cavity, from which it afterwards arises on the Surface of the Earth; but from the Places thro' which it flows, it acquires a Nature different from that of Rain-water. If it flows thro' Soils which are sandy, and full of pure Flint, it is strain'd, as it were, thro' their Interstices, deposits every Thing of a foreign Nature which adher'd to it, and becomes highly pure. On the contrary, when Spring-water flows thro' Places in which any Matter, which Water can easily dissolve, is contain'd, then it conveys along with it many of the Corpuscles it touches. After this it is of no Importance whether it flows thro' Rocks, Sands, Hills and Mountains, since it will always carry these Corpuscles along with it. Hence 'tis obvious, that nothing can be universally and generally pronounc'd as Truth with Respect to all Spring-water. This is sufficiently confirm'd from a particular Circumstance, which is, that all Spring-water boil'd for some Time, after it remains at rest and becomes cool, deposits more or less Faeces in the Bottom of the Vessel. *Hippocrates*, in his Treatise of Air, Water, and Situations, tells us, "that sound and healthy Persons may use any Spring-water without Distinction, but that such as are sick ought to drink those which are best suited to the particular Nature of their respective Diseases. Those who are costive ought to use such Waters as are sweet, light, and transparent, but those who have a Solubility of Body and are of moist and phlegmatic Constitution, ought to drink Waters which are crude, hard, and somewhat saline,

“ Saline, by which Means their Bodies will be dried, for those Waters which are easily concocted and attenuated, render the Body soluble, but such as are crude and hard to be concocted, render Persons costive.

River-water has the same Origin with Spring-water, and only differs in this, that it does not run under the Earth in order to be collected into one Receptacle, but flows on its Surface in small Rivulets, which gradually concur to the Formation of large and rapid Rivers, which are continually expos'd to the Air. Hence whatever is contain'd in the Air, whatever is convey'd by the Winds, whatever is communicated from Vegetables and Animals which fall into it, and whatever Fish and amphibious Animals deposit in it, is collected in Rivers, mixed with their Waters, subsides to the Bottom, and may at last, by Maceration, be putrified and dissolv'd. Besides, as Rivers flow thro' so many different Places, such as Woods, Groves, and often populous Towns, they must in these different Places be of different Qualities. Thus River-water will not only receive the Rain as it falls, and partake of the Nature of the Soil thro' which it flows, but will, also, be contaminated by all Kinds of Insects which fall into it, by Animals which live and Plants which grow in it; for 'tis certain from Experience that after a Series of hot and dry Weather, River-water is highly unwholesome, on Account of the many noxious Plants and Herbs which in such Weather spring up in it. The Water, therefore, of the same River, is not in every Place and Season the same, but varies in different Places and Seasons. Hence some surprising *Phænomena* have been observ'd of River-water. Thus in the *Philosophical Transactions* we are told, that some River-water

preserved in Casks, has emitted highly fetid Vapours, and such as were capable of being set on a Flame by a lighted Candle, and afterwards became inodorous and sweet, and in the *Journal des Sçavans* for 1667, we are told, that if Straw is spread on the Banks of some Rivers, a Sort of Froth is collected in it, which deposites its Humidity, and then concretes into a tenacious Matter, and by the Force of Fire acquires the Hardness of a perfect Stone. The River-waters also in the Island of *Formosa* are highly beneficial in rendering the Ground fertile, but prove mortal to such as drink them. But all these and many more surprizing Properties of River-waters, are to be ascribed to their Contents, rather than to the Waters themselves, for if River-waters run for a long Way upon Sands and pure Flint, they are not only out of Danger of being contaminated, but also become more pure, and fit for drinking. 'Tis commonly said that the Water of the *Thames* kept in Ships, in hot Climates spontaneously ferments and acquires the Qualities of Spirits of Wine. But the celebrated Sir *Hans Sloane* asserts, that this is false and that the *Thames*-water only ferments, and assumes a vinous Quality, in impure and sordid Vessels. But notwithstanding its Impurities, it is accounted the best Water for the Purposes of Sailors.

Well-water, or Pump-water, is properly that which is obtained from a subterraneous Bed of Sand; for by digging in the Earth, to a certain Depth, we arrive at pure Sand, out of which the Water always rises. If, therefore, no other Water is conveyed into the Well, but what passes thro' the Sand, the Water will be pure and limpid; but if there are Salts, saline or saponaceous Substances mix'd with the Sand, these Bodies

dissolving in it, will communicate their Weight, and other Qualities, to the Water; for which Reasons Well-water is so rarely to be had good, and always differs according to the Diversity of Places.

Stagnant, or Pond-waters are such as are found in Lakes, Marshes, and Ditches. These not only retain what they receive from the Bottom or Soil, but are also contaminated with other Substances which fall into them. Hence, by the Heat of the Air especially, they become corrupted, putrid, fetid, and turbid. In the hydrostatical Ballances they are, also, found to be heavier than pure natural Water, either of Springs, Rivers, or of Rain. Now if we consider that in populous Towns, the stagnant Waters are filled with the Sordes of Common-Sewers, and all Sort of Filthiness, we may understand that such Waters may be impregnated with different Qualities, so that in some Towns they shall excellently serve the Purposes of Dying, for Instance; whereas the stagnant Waters of another Town, will not answer the same End when employed by the same Tradesmen; and the longer such Water stagnates, the more impure it must become, and the more unfit for all alimentary and culinary Purposes, and the more offensive to the Health of the Inhabitants, on Account of the noxious Vapours perpetually exhaling. *Hippocrates* in his Treatise of Air, &c. among other Disadvantages attending stagnant Waters, tells us, that those who use them have Disorders of the Spleen, are subject to be costive, and have their Faces, Shoulders, and Cavicles, emaciated; that in the Summer-time stagnant Waters induce Dysenteries, Fluxes, and quartan Fevers; that in Winter, they produce in young Persons Peripneumonies and Madnefs, where-

as in such as are old they bring on burning Fevers.

From what has been said, 'tis evident that Waters may be impregnated with an almost infinite Variety of Qualities, according to the Substances they receive either from the Soil or elsewhere. Hence, we are enabled to account for some of the wonderful Qualities of Waters, mentioned by Authors; such as that some of them induce a stony Crust upon Bodies thrown into them; that other Waters dropping from Rocks are indurated into Stones; that some produce Intoxication, like Wine; that some are hot, and others cold; and that some contribute to the Cure of Diseases, whilst others soon prove mortal, even by their Exhalations.

We now come to consider the Method of discovering the Bodies with which Waters are impregnated, and the Means of depurating such as are impure.

If the Water, then, is of a mercurial Nature, a urinous Alkali mix'd with it, causes a white Precipitation, but by the Effusion of a fixed Alkali it becomes red, and with both these mixed, it assumes a dirty Colour. If two Grains of Mercury Sublimate are dissolved in a Quart of Water, this Solution changes the common blue Paper, which is tinged with Turnsole, to Red, and thereby discovers its Presence. If Arsenic or Orpiment is contained in the Water, it becomes black with a Solution of Lead, or of *English* or *Dantzic* Vitriol, but assumes a white Colour, with urinous Salts, and the Water poured upon blue Paper turns it black. But a more infallible Experiment for this Purpose is, to evaporate the Water gently, and pour the Residuum upon a red hot Iron Plate, in which Case, if the Water is impregnated with any of these Substances, it will render the

Plate white, and emit a highly offensive Smell. If Water in its Course has been impregnated with antimonial Particles, with an Alkali, it becomes red, and generates Flowers of a faint red Colour, and fetid Smell. If Water has contracted any acrimonious Particles from Silver, a Solution of common Salt produces a white Precipitation. Water impregnated with Copper, is by volatile and urinous Substances changed into a blewish Colour. Chalybeate-waters become black with Galls, and all Astringents, but with a Mixture of Sulphur assumes a blackish Purple Colour; and indeed the best Quality of many hot Springs, seems to consist in Sulphur dissolved by an alcalescent Nitre. Water impregnated with Tin, assumes a dark Purple Colour by a Solution of Gold, whereas those impregnated with Gold assume the same Colour with a Solution of Tin. Sulphureous Waters are known by Sugar of Lead, and a Solution of Silver, which in that Case becomes blackish, but assumes a whitish Colour with other metallic Liquors.

Aluminous-Waters, are not only known by their viscid astringent Taste, but also by their being converted into a viscid Magma, by fixed and volatile Salts of the alkaline Kind. Water impregnated with Lime is frequently to be met with, and becomes cloudy with fixed alkaline Substances, but somewhat more so, with such as are of an urinous Nature; and in the Whiteness of its Colour it resembles Precipitate Mercury. Besides, Silver dissolved in an acid Menstrum render Water impregnated with Lime turbid and brownish, but with Oil or Spirit of Vitriol it assumes a deep Purple Colour. It becomes greenish with Syrup of Violets, with Turnsole it becomes blewish, not with any Precipitation, but only a Change of Colour,

These are the common Methods of discovering the Contents of Waters.

Some Waters are naturally so impure, as to require Depuration before they are fit to be drank, or employed for culinary Uses. Various Experiments have been thought of, in order to answer this Purpose, but the most natural and easy is, that of permitting them to remain in a State of Rest, till their most gross and sordid Particles subside to the Bottom of the Vessel. When Water is deposited for some Days, or till it becomes fetid, in any temperate or warm Place, in well closed Vessels, but yet so as that there may remain some Communication with the external Air, it will in a little Time become sweet again, and the Water will appear clear, limpid and pure, and a slimy terrestrial Sediment will subside. This Expedient seems to have been discovered by Chance, because those who sail to the *Indies* find that the Water which putrifies and corrupts in the Casks, becomes good and limpid after some Time. The purest Water, under the equinoxial Line, at first becomes mucid and fetid, then of an Ash Colour, then greenish, and last of all assumes an unseemly red Colour; notwithstanding which Changes, it is again spontaneously restored to its natural Colour and State. When Water is strained thro' a linen or woollen Cloth, or thro' pure Sand, the Sordes contained in it remain in the Filtre; for which Reason in Armies they sometimes mix impure and marshy Water with Sand and Chalk, and pour it from one Vessel to another, after which they strain it and permit the grosser Parts to subside, and thus render the Water pure and limpid. Many Inhabitants of *London* depurate the thick and muddy Waters of the River *Thames*,

by an Admixture of Sand therewith in their Cisterns, in which the Sordes are deposited whilst the pure Water remains at the Top. What is commonly called the filtrating Stone, is by many used for the Depuration of Water, because its Pores transmit what is pure, but refuse Access to the Sordes. By boiling Water gently in a close Vessel, and permitting it to remain for some Time in a State of Rest, many heterogeneous Bodies subside to the Bottom of the Vessel. The *Egyptians* purify the turbid Waters of the River *Nile*, which is originally unfit to be drank, by Means of a Mass prepared of the Meal of Sweet Almonds, which they rub over the internal Surfaces of their Vessels, by which Means the Water becomes limpid in half an Hour. The *Chinese* depurate their turbid Water and render it drinkable by throwing Alum into it. In the *East-Indies*, turbid and corrupted Water, is corrected and rendered pure by the Admixture of certain Seeds, Beans, or the *Nux Vomica*. If we may believe the *Antients*, the Bitterness is removed by throwing the Powder of Coral into it, or by putting a Bag full of bruised Barley into the Vessel in which it is contained. But none of these Methods is sufficient for the Depuration of Water impregnated with Salts: But Distillation is necessary to make the most pure and limpid Part of the Water ascend. The purest Water is obtained from a Distillation of Snow-water.

As for the Preservation of Water, most Species of it cannot be long kept without Corruption, whereas others may be kept for twenty Years in close stoppt Bottles. Water in general is best preserved in cold Cellars, and in earthen or glass, rather than in wooden Vessels, because from these last it may

receive into its Pores a Matter which favours Putrefaction. Metallic Vessels are not to be used for this Purpose, lest, if the Water should abound with Salts, it should be impregnated with the Quantity of the Metal by their Means. For the Preservation of Water, nothing is more proper, than to drop into it a sufficient Quantity of Spirit of Vitriol which resists all Putrefaction, and prevents the Generation of Insects. Another Method of preserving Water is, first to wash the Vessel well into which it is to be put, and then to hold it for some time over the Fume of kindled Sulphur. A small Quantity of Alum put in Water, also, preserves it from Corruption. A small Quantity of distilled Sea Water, also, mixed with common Water, preserves it from Putrefaction. But all these Expedients would be entirely useless, if pure Water could always be kept in Vessels into which the Air has no Access; for according to *Boerhaave*, Water poured into a sound glass Vessel, and then hermetically sealed up in that Vessel, so as to admit no external Air, remained for many Years without any sensible Change; so that in so long a Time, it neither concreted, nor generated Earth, nor any other Thing within itself, tho' the Experiment was made in the Air of *Rome*, which is considerably hot.

As for the Uses of Water, they are various; but the most extensive Advantage of Water, depends upon its solvent Quality; for by its Means we separate the Salts from Bodies, and render such Salts as are dry, active, and fit for medicinal Purposes, by dissolving them in Water. Some Bodies are mixed, others precipitated from each other, and Spirits are diluted and weakened by Means of Water;
and

and hence many extraordinary Effects are produced in the Works both of Art and Nature, as Putrefaction, Fermentation, Effervescences, and many others. Thus *Boerhaave* says, "that Water is the moving Instrument and most universal Vehicle, which dissolves active Bodies, mixes and applies them to each other; which temperates the Acrimony of many Bodies, unites with them, agitates the whole, and thus becomes the principal Instrument in all Physical Changes and Operations." Water is so necessary to apply the Matter of Nutrition to Vegetables, that there can be no Vegetation without it; besides, this Fluid enters the very Composition of Plants. In the fossile Kingdom Water seems to convey the Matter by which all Stones grow, and to be the Cement by which their Parts adhere to each other, just as those of Lime do. Other Fossils so long as they exist in the metallic Veins, under the Form of gross, pinguious, and heavy, Juices, resemble a saline unctuous Substance, but may in this State be dissolved in Water, even contain a diluting Water in themselves; for all concreted, saline, vitriolic and metallic Juice, evince the same, since all Experiments shew, that Water acts the most considerable Part in them, dilutes, moves, changes, augments, and mixes them. The Nutrition of Animals is entirely performed by Water, which is also absolutely necessary to Life, being the most mild and fluid of all the Juices of the Body, and best calculated for penetrating into the most minute Vessels. By an excessive Diminution of this Fluid in the Body, Life immediately ceases, because the Blood and Humours circulate no longer. Nor is there any Liquor known in Nature which can supply the Absence and Defect of Water.

Those who by the gentlest Fire have separated Water from any of the human Juices, have found, that Water constituted the greatest Part of them, and render'd them fit for passing thro' their respective Vessels. Hence, far the greater Part of the perspirable Matter of *Sanctorius* is Water. Besides, if all the solid Parts of animal Bodies are examined, 'tis found that they owe their Fitness for the Purposes of Life to Water, which being taken away, none of the Conditions requisite to Life remain. For this Reason, the antient Chymists called Water the *Universal Wine*, which was liberally drank by all Animals, Plants, and Fossils; so that in this Sense, we may justly assert Water to be the prolific Principle of which all Things are formed. Health which is the principal Perfection of Life, and the due Exercise of all the Actions subservient to it, are more owing to Water than any Thing. The Growth and Increase of the Body is principally carried on by Water. Many Disorders are brought on, and many removed by Means of Water. Death itself is often to be attributed to an Excess, but much oftener to a Defect of this Liquor, which on various Occasions performs happy and surprising Cures.

Hence 'tis obvious, that the Physician ought to be well acquainted with the Properties of Water, that he may know how to apply it properly to medicinal Uses. As Water is a Menstruum for many Bodies, so we may easily understand its Propriety for culinary and pharmaceutic Purposes. It serves to dilute the Humours of the Body, and preserve them in due Fluidity; and as it is entirely destitute of Taste and Smell, it is highly proper for allaying the Acrimony of the human Juices. Water is, therefore, not only a Vehicle for distributing

the nutritive Juice, but is also the best Diluter, when the thick and viscid Fluids are to be divided and attenuated. Water, also, promotes the Concoction of the Aliments, and resolves Obstructions, except those of the oleous and tenacious Kinds, which require Water mixed with saponaceous Substances. It obtunds the Spicula or Asperities of Salts, and consequently checks the excessive oscillatory Motion of the Solids, for which Reason it is justly accounted the most mild, gentle, and anodyne Medicine, excellently calculated for correcting Acrimony, and removing the perternatural Rigidity of the Parts. Water also assists all the Excretions and Secretions, since it proves diuretic, diaphoretic, sudorific or purgative, accordingly as Nature is inclined to one of these Excretions more than another. But it proves injurious when drank to Excess by Persons abounding with aqueous Humours, and by those of phlegmatic or lax Habits, by moistening, softening, and destroying the Tone and Elasticity of the Solids. Hence it may be justly said, that Water judiciously exhibited is an universal Medicine, not only for the Preservation of Health, and Prevention of Diseases, but also for answering the several Intentions of Cure after various Disorders are formed. Water is of singular Use in Medicine on Account of its solvent Quality; for by this Means it is excellently calculated for extracting the medicinal and active Virtues of Bodies, not only in the Solutions of saline and gummatous Substances, but also when used in the Preparations of Infusions and Decoctions. But all these Things are to be understood only of simple fresh Water, the Goodness of which bears a Proportion to its Purity and Lightness. And indeed the Uses of Water are so extensive, in all the Bran-

ches of Pharmacy, and Chymistry, that nothing is to be done without it. But since 'tis certain from Experience that an Excess of Water is prejudicial to Health, and that its Effects upon the human Body vary according to the Degrees of its Heat or Coldness, we shall therefore consider cold and hot Water.

Cold-water, then, which is neither heated by the Sun nor Fire, corroborates the Fibres, and increases their Resistance, in Consequence of which it propels the Humours, accelerates their Motion, and preserves Health. But Water so excessively cold as to be near to freezing, too greatly augments the Elasticity of the Parts, injures those of weak nervous Systems, and at last coagulates the Blood. Our Countryman Doctor *Harris* informs us, that cold Water drank in the Morning, alleviates the Heat arising from a Debauch over Night; but he dissuades the Use of it in these Fevers incident to the Inhabitants of the northern Countries, because it represses the Sweats, augments Coughs and Peripneumonies, and is absolutely prejudicial to the Stomach and Intestines in Persons of cold, weak and phlegmatic Habits. A great many celebrated Physicians have advised the copious Use of cold Water for the Cure of acute and malignant Fevers, provided they are not accompanied with any Disorders of the Lungs and Viscera. *Antonius Michelotti*, a celebrated Italian Physician, gives us an Account of a violent Vomiting of Blood cur'd by drinking excessively cold Waters in the Winter-time. Cold Water, both externally and internally used, affords great Relief in many Diseases. Thus in *Ephemerid. Nat. Curios.* Dec. 1. An. 2. Obs. 49. we read of a Palsy cured by drinking cold Water. In *Mem. Trev.* we are informed that the Eruption of the Small-

pox was promoted only by drinking large Quantities of cold Water. In the *Acta Hafniensia*, we are inform'd, that the most violent Headachs were remov'd, by applying a Towel wet with cold Water about the Neck. And in *Eph. Nat. Curios. Decad. 2. An. 10. Obs. 139.* we are told, that a bilious Cholic was cur'd by drinking cold Water: In a Weakness of the Stomach, drinking cold Water in the Morning, and two Hours after Meals, is justly recommended as an excellent Remedy, because it not only corroborates the Tone of the Stomach, but also attenuates the Aliments still contain'd in the Intestines, promotes the Excretion of the Feces, and procures a due Fluidity to the Chyle. Hence the celebrated *Boerhaave* recommends it in a febrile Nausea. But these Things are to be taken under proper Restrictions; for in tender Bodies which want a due Degree of muscular Motion, the colder the Water is, and the more of it is exhibited, the more Misfortunes it will produce; for in *Eph. Nat. Curios. Decad. 3. An. 2. Obs. 166.* we are told, that several Persons have become dropical, and pleuritic, by drinking cold Water on an empty Stomach. Besides, in the last quoted Work, there is a great Variety of Instances, in which cold Water has produc'd the most fatal Effects.

Cold Water sprinkled on the Breast, recovers Persons from *Deliquiums*, by procuring a contractile Force of the Fibres, and consequently promoting the Circulation of the Humours. In the *Memoirs of the Royal Academy of Sciences*, we are told, that by a young Man's immersing his Feet in cold Water, when he was excessively hot, he had a Tumor excited of the *Epigastrium*, and *Hypochondrium*, and an hectic Fever, and an Abscess of the Liver produc'd. This happen'd, because

the Fibres of the inferior Parts being contracted, repell'd the Humours to the superior Parts, especially the *Meanders* of the hepatic Vessels, whence arose the Tumor, Inflammation, and Abscess: With Respect to the Use of cold Water in arthritic Disorders, the Reader may consult the *Eph. Nat. Curios.* and *Le Clerc's History of Physic.*

Water warm'd to such a Degree that an healthy Person can bear his Hand in it, is of a far more dissolvent, resolvent, aperient, moistening, emollient, and relaxing Quantity than cold Water; warm Water according to the celebrated *Hoffman*, when drank in large Quantities, by its elastic Force enters the Pores, insinuates itself every-where, and diffuses a perceptible Heat thro' all the Body; for if the Blood adjacent to the Stomach, is render'd more fluid by its Heat, according to the Laws of the Circulation, the whole Blood must be render'd more fit for Motion, just in the same Manner as the whole Body is warm'd, by applying Heat to its Extremities, the Feet. By this Means, the Spirits being rous'd, perform their Functions the better. Thus by drinking warm Water we are render'd brisk, chearful, and fit for transacting Business. That the *Chinese* are for the most Part Strangers to arthritic Disorders, is commonly ascrib'd to the great Quantities of Tea they drink; for warm Water, which is the most considerable Ingredient of the Tea, promotes Perspiration, and carries off the extraneous, and foreign Salts: But those who use Tea to excess, do but ill consult their own Health, since by destroying the Tone of the Solids, the Circulation of the Humours is so disturb'd, and the Blood itself so attenuated, as to flow into the lateral Vessels; whence arise Weakness of the Viscera, Anxieties, and other Disorders, caus'd by too

lax a State of the Solids, and the Want of a due Consistence in the Fluids. *Boerhaave* informs us, that Palsies are produc'd by the constant and excessive Use of warm Water.

As for boiling Water, 'tis to be observ'd, that it burns the solid Parts, and could it immediately reach the Blood of a live Person, it would instantly coagulate it,

CHAP. III.

Of FIRE.

FIRE is one of the grand Instruments in natural and artificial Chymistry; but the Nature thereof is so extremely abstruse, as to have perplex'd the greatest Philosophers of all Ages, insomuch, that we are not much the wiser for their Researches. I will not pretend to affirm, that *Boerhaave* has succeeded much better than the rest; but as he has contradicted some popular Opinions, with Respect to Fire, I shall take Notice of some Particulars, and refer the Reader who desires farther Information, to this Author, who in the first Volume of his Chymistry has treated very copiously of Fire.

Tho' 'tis highly difficult, if not absolutely impossible, to give a just and accurate Definition of Fire; yet we may form such an Idea of it, as to know, whether it is absent from, or present, in any particular Place, or Body; but at the same Time, 'tis frequently no easy Matter, to discover such a Mark of Fire, as will always evince its Presence, tho' the Quantity of it be ever so small, since upon Examination it evidently appears, that there is an incredible Quantity of true Fire in those Places, where every Person not only judges that there is none, but also imagines there is really something of a different Nature. Thus 'tis certain, from Experience, that

Fire is contain'd in the coldest Masses of Ice, tho' none of its Actions and Signs appear, till they are discover'd by a strong Collision, with some other hard Substance.

The manifest and obvious Signs of Fire, are said to be: First, Heat: Secondly, Light: Thirdly, Colour: Fourthly, Expansion, or Rarefaction, both of Fluids and Solids: And, Fifthly, the Power of Burning and Melting; together with various other Effects.

Tho' Heat is inseparable from Fire, yet nothing more is meant by it, than a certain Sensation of the Mind, excited by the Application of Fire to the sensible Parts of the Body.

Tho' Light, is look'd upon as a certain Demonstration of the Presence of Fire, yet, we know from the Experiments of the celebrated *Hook*, and other natural Philosophers, that it by no Means bears a just Proportion to the Quantity of Fire contain'd in Bodies; for there may be the strongest Fire, without any visible Light; and, on the contrary, the most refulgent Light, without the least Degree of sensible Heat.

As Colour is either Light itself, or a various Reflexion of it from opaque Bodies; it is evident, that as Light, so of Course Colour must be an insufficient Mark of Fire.

A great many other suppos'd Effects of Fire are but uncertain, and precarious Mark of its Presence; but we have one unexceptionable and infallible Mark of the Presence of Fire, which is its expanding Virtue; for upon an accurate Examination of all natural Bodies, whether fluid, or solid, we find none but are expanded by Fire, either of the solar, artificial, or subterraneous Kind; and this Expansion bears a Proportion to the Quantity of Fire contain'd in Bodies.

During the most intense Cold, Fire may be produc'd by the Attrition of solid Bodies upon one another, and the stronger and more rapid the Attrition is, and the harder the Bodies are, the greater Quantity of Fire will be produc'd.

Fire is actually present in every Part of Space, tho' we cannot at all Times discover it, by searching for it in the common Methods; for the most accurate Thermometers evince, that there every where actually exists an Heat, greater than the most intense Degree of Cold, tho' People are subject to imagine that there is no Heat, or Fire, in the Place where the Fluid of the Thermometer is fallen very low. Besides, Fire not only exists in every Part of Space, but is also equally diffus'd thro' every Body, the most solid as well as the most rare, tho' it is not perceptible.

Tho' Fire is of an highly penetrating Nature, yet it cannot insinuate itself into what we call the ultimate and impenetrable Elements of Bodies, since Impenetrability in this Sense, is inseparable from all Matter whatever.

Fire is produc'd; not only by Attrition, but also by Percussion, and the Vibrations of elastic Bodies, as is obvious from the Experiments made by Mr. Boyle, and other celebrated Philosophers.

Heat, or Fire, may by Means of *Speculums*, be so collected and concentrated, as to produce very surprising Effects, such as the melting all Kinds of Metals, and even Stones, as is obvious from various Experiments made by some Moderns.

When Bodies have a greater Heat in them than the ambient Fluids, or adjacent Bodies, the denser the Fluid is in which they are immers'd, the sooner they will lose their Heat. Thus Mercury, is a more expeditious Extinguisher of Fire, than either the Air, Water, or any other Fluid.

The larger any particular Body is, if every other Circumstance is alike, the longer it will retain the Heat it has admitted; for the Density of the outward Surface, always prevents the quick Egress of the Fire, which endeavours to make its Way from the internal Parts. For this Reason, when Bodies are thoroughly heated, their innermost Parts require the longest Time to cool.

Mathematicians have demonstrated, that whilst the corporeal Mass continues the same, a Body can never be reduc'd under a smaller Surface, than when it is form'd into a Sphere; now this Figure is, therefore, the most tenacious of Heat, both on Account of the Smallness of its Surface with Respect to its Solidity, and the equal Distribution of all the Parts to the Center, and their equal Recess from the Surface. But when any Body is divided into Parts, without any other Alteration, then its Surface will be increas'd, tho' its Quantity of Matter continues the same, and then it will of consequence grow cold so much the sooner.

What has been said, assists us to discover the Reasons of the Continuance of Heat in other Cases. It is an old and just Observation, that

Persons

Persons of hard, strong, and dense Constitutions, accusom'd to Exercise, and full of compact, heavy Fluids, are always found to be hotter and longer in growing cold than others; for such Bodies, must by the strong Application of their Solids to their Fluids, condense them by this Compression, and of Consequence collect more Fire within them, and retain it very tenaciously. On the contrary, lax, soft, unactive, and weak Persons, can never communicate so much Heat to their aqueous Humours; for they always suffer less Attrition, are less condens'd, relax'd into larger Surfaces, and consequently, are not so fit to retain the Heat, when once it is generated. Hence then, we see what ill Consequences are to be apprehended from both these Extremes, and what Kinds of Medicines in particular, are to be exhibited with Success. Thus the Usefulness of this Doctrine becomes very extensive.

Among all the various Bodies of the Universe, which have hitherto been examin'd, there is not one which has in itself more Heat than another; for *Phosphorus* made of Urine, is as cold as the ambient Water, whilst it is immers'd in it, tho' it soon becomes exceedingly hot and active, when it is expos'd to the Air. That surprizing Spirit of Nitre, call'd the fiery Spirit, and that distill'd Oil, which the Chymists obtain from *Sassafras*, whilst they remain quiet in close Vessels, are as cold as the coldest Ice, tho' when they are mix'd together, they produce the most terrible Fire. Tho' the Bodies of Animals have a greater Heat in them whilst alive, than inanimate Substances, yet after Death they are as cold, unless there is a Putrefaction begun.

As for the *Pabulum* of Fire, since Fire itself and some of those Bodies in which it is collected, vanish from our

Senses both together, hence it has become customary to call those Bodies, or particular Parts of them, the *Pabulum*, or Aliment of Fire; and thus far it may be allow'd without any Inconvenience. But when Chymists pretend to call them so in too strict a Sense, because they look upon them as the Nutriment of real Fire, and imagine them to be chang'd by the Fire, into the very Substance of elementary Fire, and thus to have their own proper Nature destroy'd, by assuming that of Fire, then they propose something vastly different, which ought to be carefully consider'd before it is admitted as true; for tho' the Assertion of it is very easy, yet the Demonstration of it is exceedingly difficult; and, certainly, whoever runs into this Opinion, must necessarily suppose, that those Bodies which nourish and support Fire, are by this Means constantly diminishing; and hence the Quantity of all other Bodies in the Universe, must be continually lessen'd, whilst that of elementary Fire must be continually encreas'd. Fire, therefore, thus perpetually augmenting, and at the same Time diminishing every Thing else, would necessarily have destroy'd all the Bodies in the Universe long ago. But from a Comparison of the most early Times with our own, we do not find the smallest Indications of any such Increase.

It is concluded, therefore, that when Combustibles are set on Fire, no new Fire is generated, nor is any lost when this is extinguish'd.

Boerhaave has taken a great deal of Pains to prove, that tho' all Bodies whatever are capable of receiving; and retaining Fire, yet it is the Oil only which supports Flame and is wasted thereby, so as to be the true *Pabulum*, Food, or Support thereof. And that pure *Alcohol* of Wine, which is an extremely subtil, and attenuated vegetable Oil, is the only

only Thing known that wastes entirely by Fire, so as to leave no Feces. He does not mean, that either of these are actually converted into Fire, or wasted; but that they are dissipated, and entirely chang'd with Respect to their Form, by the Action of Fire. And it appears by his Experiments, that 'tis only a Part of Oils, and even of *Alcohol*, that is the true *Pabulum* of Fire; for it should seem, that a great deal of Water, which we know is not inflammable, is separated from *Alcohol* whilst it burns. Now I think it highly probable, tho' I would only suggest this to the Learned, that it may be the Acid, a constituent Part of all Oils, however it may be disguis'd, that is the Part convertible into Flame, and the real Food of Fire. It will give Light to this Affair, to consider the Nature and Composition of Gunpowder, and its Effects when Fire is apply'd to it. This, we know, is made of Charcoal, which contains a black and highly inflammable vegetable Oil, and serves as a Sort of Tinder to kindle the Sulphur, a necessary Medium betwixt the Coal and the Nitre, which is the third Ingredient, and is known to abound with an Acid, which it receives originally from the Air. When Fire is apply'd to this Composition, it catches the black Oil of the Coal, which instantly kindles the Sulphur, and this communicates the Fire to the Nitre, in a Degree sufficient to make it burst out into a lucid Flame.

As, therefore, we find much the same Ingredients in all Combustibles, with those that enter the Composition of Gunpowder, I am inclin'd to consider all Flame, as a continu'd Explosion of the Acid included in the Body subjected to the Action of Fire.

Boerhaave, from his History of Fire, deduces the following Conclusions:

First, That simple elementary Fire insinuates itself into, and rarifies all Bodies in the Universe which fall under our Observation, whether they are solid, or fluid, or compounded of both.

Secondly, This penetrating and rarifying Quality, is so peculiar to Fire alone, that it is not common to any other Body we are acquainted with. Neither, do Effervescences, Fermentations, and particular Rarefactions of Bodies, prove the contrary.

Thirdly, Fire is distinguished by this Property, and is present in every Place, as well the solidest *Plenum*, as the most perfect *Vacuum*.

Fourthly, This Fire is every where distributed in the most equable Manner, till there arises some Cause able to collect it thus dispers'd, into one particular Place.

Fifthly, The first, and perhaps most considerable of these collecting Causes, is the Attrition of some Kinds of Bodies with each other.

Sixthly, Fire is, from its own Nature, mov'd equally every Way, or at least is spontaneously expanded in this Manner.

Seventhly, It is, however, possible, that this Motion, or Expansion of Fire, may be directed in parallel, or converging Lines, which is a second Way of collecting Fire.

Eighthly, The principal Cause, which compels Fire, of itself undetermined, into a Parallelism, is the Sun.

Ninthly, These Rays are made to converge, or are united into a small Space call'd a *Focus*, either by Reflexion, or Refraction, which is a third Method of collecting Fire.

Tenthly, The coldest Steel, violently struck against the coldest Flint, in the most intensely cold Weather, in a Moment produces Fire, which is a fourth Method; so that Fire does

not

not any Ways depend on the Sun with Respect to its Matter.

Eleventhly, Fire continues for some Time in Bodies, and is united to them, whilst the Time of its Continuance is proportionable to the Density of the Body with which it is united. But there is no Body as yet not known capable of retaining the Fire always. This is called elementary Fire, but besides this Species of Fire, there is also, as some People imagine, another Sort, which consumes combustible Bodies, so as to render them invisible; which is supposed to be fed and supported, and is falsely believed to convert combustible Matter into Fire itself. This is thought to be produced, when Fire previously existing, is applied in the open Air to a proper *Pabulum*, which is a fifth, and of all others the most common Method of collecting Fire.

Twelfthly, There is as yet discovered but one Kind of Matter in the Universe which will feed Fire, in such a Manner as to be so entirely consumed by it, so that nothing shall be generated but pure simple Flame, and nothing shall remain behind when the *Pabulum* is burnt away, and the Flame goes out; and this Matter is pure *Alcohol*. But other Bodies being mixed with the true *Pabulum* of Fire, and agitated by the Fire along with it, are capable of considerably increasing its Power.

Thirteenthly, Elementary Fire may be increased in particular Places to a surprizing Degree, so that by this Means certain physical Effects, not easily understood in any other way, may be produced, and reduced to a Kind of natural History. When this elementary Fire is collected in a particular Place by whatever Cause, it may there be supported by the Help of a proper

Pabulum, which is always either *Alcohol* or Oil, obtained either from the animal, vegetable, or fossil Kingdoms.

Lastly, *Boerhaave* concludes, that Fire is possessed of all the Properties of a Body, and that its Corpuscles are highly solid, smooth, and continually in Motion.

It must be however carefully observed:

First, That Fire is not an universal Solvent, since it dissolves many Bodies without producing the same Effects on others, which however are capable of being dissolved by other Means.

Secondly, That Fire is not so pure a Solvent as to extract from Bodies only those Parts which existed in them before, for at the same time that it separates some Parts, it mixes others together.

Thirdly, That in some Bodies it produces nothing new, but leaves them without any considerable Alteration.

Fourthly, That those Parts separated by Fire, however applied, from compound Bodies are not simple Substances, but variously intermixed and blended with each other.

Fifthly, That Experiments evince, that the Composition of Bodies is as much affected by the Action of Fire, as their Separation, since it unites the most different Bodies so intimately together, that the new formed Substance appears perfectly simple, and is not liable to any Alteration from its Power afterwards.

Sixthly, That the same Fire applied in different Degrees, will in one Degree compound those Bodies, which it will again resolve in another. And,

Seventhly, That the same Degree of Fire applied to the same Bodies in different Circumstances, produces Effects

Effects surprisngly different, especially according to the various Admission of the Air in the Operation.

But as Fire is an Instrument absolutely necessary for chymical Productions, the last quoted Author has divided it into six Degrees.

The first of these is that within the Compass of which Nature brings about the Work of Vegetation in Plants, so that it is highly probable that this Degree of Heat is best suited to impregnate Oils with the choice Spirit of some Vegetables, without dissipating the richest Part of them.

The Second is most commodiously estimated from the highest to the lowest Degrees of Heat observed in healthy Persons. Within the Compass of this Heat are included the vital Actions of Animals, the Fermentation of Vegetables, and the Putrefaction both of Vegetables and Animals, and the Generation, Breeding, Hatching, Birth, and Nutrition of Animals. This Degree of Heat, Chymists use to prepare their Elixirs, Tinctures, and in many other Processes which require a gentle Heat.

The Third is from the extreme Degree of the Second, to that in which Water generally begins to boil; and this Degree of Heat serves for the Distillation of the Oils, and the medicinal Waters of Vegetables. The sanguineous and ferous Juices of Animals are in boiling Water coagulated into a scissile Mass, whilst all their Solids are destroyed by it, and reduced to a thick and tenacious Liquid; and hence it is absolutely destructive to all Animals.

The fourth is from the extreme Degree of the Third, to that within the Limits of which all Oils, saline Lixiviums, Mercury, and the Oil of Vitriol recede from the

Fire, fly upwards, and by this Means distil. In this Heat Lead and Tin are put in Fusion, and may be mixed with each other. By this, also, the Oils, Salts, and saponaceous Juices of Vegetables and Animals, are rendered volatile and acrid, and become more or less alcacescent. The solid Parts of them are by this Heat dried, and if they are calcined, they are converted into a very black Coal, are all absolutely destroyed, quite altered in their Qualities, and entirely lose their Virtues. By this Heat too Chymists sublime fossil Sulphur, and Sal-ammoniac.

The fifth is from the highest Degree of the Fourth, to that in which the rest of the Metals are put in Fusion. Glass, Gold, Silver, Copper and Iron, for a considerable Time bear this Degree, which destroys every Thing else. In this Heat all other fixed Bodies grow white, the fixed Salts of Vegetables and Fossils are put in Fusion, are deprived of almost all their Oils, acquire a greater alkaline Acrimony, and with Sand or Flints are converted into Glass. In this Heat Lime-stones are calcined, and other Bodies either vitrify, or become volatile, and are dissipated in the Air.

The sixth and last Degree comprehends the whole Compass of catoptrical and dioptrical Fire, which scarcely any Body is able to resist. By this Gold itself suffers very considerable Alterations. The ultimate Effect of this Heat on Bodies is their Vitrification. This the Eastern *Magi* seem to have understood, when they prophesied that the whole World would at last be destroyed by Fire, and that it would then be converted into pellucid Glass.

It is of the greatest Consequence for the Chymist to know accurately the Methods of raising and supporting

porting these various Degrees of Fire according as the Intention requires ; for on this principally depend all the Operations in Chymistry.

'Tis to be observed, that it is far more difficult to preserve a great Degree of Cold for a considerable Time, than it is to keep up a very great Heat, as is sufficiently obvious from the intense Fires requisite in metal and glass Works. The first Way of exciting and supporting a moderate Heat depends upon the Choice of such a *Pabulum* as may produce the Strength of Fire requisite for our Purpose. *Alcohol* of Wine yields a Weak and equable Flame, which may be increased or diminished by a greater or smaller Number of Wicks ; when we are therefore resolved upon the Degree of Heat we intend to use, we are to light a Lamp with as many Wicks as, by the Thermometer, appear necessary to excite the Degree desired. Next to *Alcohol* are the light and porous and spongy Kinds of *Pabulum*, such as Rushes, Straw, dry Leaves, Hair, Shavings of Wood, dried Stalks of Buck-wheat, Chaff, and Bran. Next to those are Oils, Tallow, Wax, Camphire, Pitch, Resin, Sulphur, and other Compounds. Next are thick, heavy, hard and compact Woods, and the Coals prepared of them ; and last of all red hot Metals and fossil Coals.

Various Degrees of Fire, the greatest not excepted, may be excited by the Quantity of the combustible Matter used, for if a large Quantity of Fuel is set on Fire all at once, the Fire thus produced will be proportionably stronger, the Force of it all being united together.

There is a great Difference in the Heat with Respect to the Object it acts upon, according to the Distances at which Bodies are ex-

posed to the Fire, the Heat always decreasing as they are removed farther off. But the Proportion of this Decrease is not easily ascertained.

The Degrees of Heat, also, depend much on the Agitation, Concussion, and Compression of the Fire when it is excited by its *Pabulum*, and included within its aerial Arch ; for by these the Violence of it is greatly increased, and the more so, the stronger they are. As we can by no Means procure this Agitation and Compression of Fire more conveniently and effectually, than by blowing the Air forcibly on the Fire, so Bellows are the Instruments by which we direct this Pressure of the Air on the Surface of the Fire, by which Means its Parts are agitated with great Violence. Thus if the Wind of several large Bellows is, from different Parts, directed upon the Center of the same Fire, it will act with so much the more Strength upon the Body placed in that Center, and consequently the Changes induced upon such a Body will be so much the more considerable.

The Chymists have many Contrivances for raising and supporting the various Degrees of Fire, or Heat, proper for their Operations.

Thus they procure a Sand Heat, as it is called, by placing a Pot or Vessel of cast Iron or any other Substance that will bear the Heat, upon the Fire. Then this Vessel is filled with Sand, and another Vessel containing the Matter to be acted upon, is placed in the Sand. Sometimes also the Filings of Iron, or Ashes, are used instead of Iron for these Purposes.

The reverberatory Heat is made in a Furnace covered with a Dome, that by this Means the Heat or Flame, which has always a Tendency to make its Escape at the superior

superior Parts of the Furnace, may be reverberated, or beat back on the Vessel or Body exposed to it.

The naked Fire is, when in distilling there is no intermediate Substance between the distilling Vessel and the Fire, or when it touches the Fire, or receives its Heat without the Intervention of any other Body.

The Lamp Fire is, when any Matter contained in a Glass Vessel is rendered hot by the equable Heat of a lighted Lamp. This Heat is used in order to soften the Necks of small Glass Vessels in order to have them hermetically sealed.

The *Balneum Mariæ* is, when the Vessel containing the Matter to be heated, is placed in a Vessel full of Water, under which a Fire is put, that by this Means the Water becoming hot, may in its Turn heat the Matter contained in the Vessel.

A Vapour Bath is when a Vessel containing any Matter, is heated by the Steam of hot Water.

The Fire of Suppression is, when in order to distil per Descensum, the Fire is laid above the Matter, so that the Moisture forc'd from it by Means of the Heat, is precipitated to the Bottom of the Vessel; or when the Body of a Retort, or other Vessel, is covered over with Fire, this is called a Fire of Suppression.

Insolation is, when any Matter designed either to be put into Fermentation, or dried, is exposed to the Rays of the Sun.

The Heat of Horse-dung, called also the *Horses Belly*, is when a Vessel, containing any Matter either to be digested or distilled, is placed in a large Heap of Horse-dung.

A Heat of the Skins of Grapes collected in large Quantities after the Vintage, may, like the Bath of

Horse-dung, serve for Digestions and Distillations.

The Heat of quick Lime moistened, may serve for some Distillations; when, for Instance, after being mixed with Sal-ammoniac, it makes a very subtil Spirit distil from it, without the Assistance of any other Fire.

The Fires of Sand, Filings of Iron, and Ashes, have generally their Degrees from the first to the third, but that of the Filings of Iron has a stronger Heat than the others, because they easily become first hot, and then red; the Fire of Ashes is the most moderate, because they do not retain so great an Heat as the other Substances.

The reverberatory Fire has its Degrees from the first to the fourth, which is that generally raised to the greatest Violence.

A Vessel may receive different Degrees of Heat from a lighted Lamp, by either keeping it at a certain Distance, or gradually advancing it nearer; but when the Vessel is once heated, an equal Heat may be always continued.

The *Balneum Mariæ* and Vapour Bath have also their Degrees; for according as the Water of the Bath is more or less heated, the Distillation is more or less promoted. We may, therefore, call it the first Degree of the *Balneum Mariæ* or Vapour Bath, when the Bath or Vapour are only moderately tepid, as they ought to be when any Matter is put in a Vessel and exposed to them for the Sake of Digestion. Their Heat of the Second Degree is when the Water of the Bath, and Steam of the Water, are so hot that a Person cannot hold his Hand in them, as they ought to be when a gentle Distillation is to be produced. Their third Degree of Heat, is when the Waters of both

both Baths boil, in order to hasten the Distillation.

The Fire of Suppression has, also, its Degrees; for sometimes warm Ashes are only used in order to excite a very mild and gentle Heat, which is the first Degree. At other times a small Quantity of live Coal is mixed with the Ashes, which is the second Degree; and at other Times they place upon a thin Bed of Ashes, a large Quantity of live Coals, which is the third Degree of Heat peculiar to this Fire of Suppression.

Insolation has, also, its Degrees in Proportion to the Heat of the Sun to which Substances are exposed. The best Insolation is made in the Months of *July* and *August*, because the Sun has then more Force and Vigour than at other Times.

The Baths of Horse-dung and grape Skins have also their Degrees, according to their Qualities, and the Heat of the Places where they are.

The Heat of quick Lime also has its Degrees, for according as we desire it more or less strong, we expose it in Powder, a longer or shorter Time to the open Air.

Another Method of exciting and supporting a long continued Heat, is by Means of that Furnace which Chymists call an *Athanor*, which is so contrived as to keep up a gentle Heat for any Length of Time, by supplying it every twenty-four, or sometimes every forty-eight Hours, or at longer Intervals, with a proper Quantity of Coals. This Method is very useful in Cases where a long continued Heat is required.

CH A P. IV.

Of E A R T H.

BY the Word Earth, Philosophers and Chymists mean, a simple, hard, friable fossil Body, which is fixed, but not melted, in the Fire, nor is capable of being dissolved in Water, *Alcohol*, Oil, or Air. What is commonly called Virgin Earth is so simple, that it appears as uniform and homogeneous as Metals themselves. When it is perfectly separated from every Thing else, it is hard and consistent notwithstanding its exceeding Fineness. The Matter of Earth is friable, because it always suffers itself to be reduced to a fine Powder, in which Respect it widely differs from true Metals and Gems. But its greatest Difference

from these Substances consists in this, that it remains so fixed and immutable in the most intense Fire, that when it is entirely alone it is impossible to put it in Fusion.

A most perfect Earth is procured from Rain Water; for if we catch pure Rain Water, and distil it carefully, we find at the Bottom of the Vessel a feculent Matter, that when collected, dried, and burned, yields some Ashes, which being carefully freed from all the Salt it contains, produce a fine pure Substance called *Virgin Earth*, which if it is thoroughly separated from every other Substance, remains fixed in a Crucible in the strongest Fire,

the

tho' when mix'd with some other Bodies it may be dissipated into its ultimate Particles. Of this no other Proof is necessary, than the burning of Wood under an high Chimney, in which Case the Smoke fixes a black Soot to the uppermost Parts of the Chimney, which being chymically examined by Fire, yields a large Quantity of Earth, which was carried up so high by the Oil and Salt which were mixed with it, and yet this Earth, when purified and separated from every Thing else, remains fixed in the strongest Fire. Simple Earth, is also obtained by a Distillation of the purest Rain Water. But even in this Case the Feces produced will contain in them every thing that was together with this Earth floating about in the Air, and at the same time is not volatile enough to ascend, in that Degree of Heat with which the Distillation is performed.

Such a pure and simple Earth may be, also, obtained from the Ashes of burnt Vegetables, for if these are carefully washed with Rain Water, we may by this Means perfectly free them from all the fixed Salt which remained in them. And as the Fire had before carried off all the Oil and volatile Salt, the Earth will at last remain in the Water by itself.

By putting any Kind of Vegetable hitherto known into a Retort, and raising the Heat from a gentle to the strongest Fire, so that every Thing may come over successively into the Receiver that can be raised by those different Degrees of Heat, the Vegetable will be divided into two distinct Parts, one which suffers itself to be carried up into the Receiver, and another which remains at the Bottom of the Retort and bears the utmost Force of the Fire without ascending, being a fixed

black Coal, the Ashes of which yield an Earth exactly like the former when treated in the same Manner. And the volatile Parts which came over into the Receiver, will upon every Rectification, leave some Feces behind, from which a pure virgin Earth may be procured, exactly resembling that which is produced by the Coal.

Hence, therefore, 'tis certain that this Earth may be procured from any Part of Vegetables whatever; and that amongst all the Sorts thus produced, there is not the smallest Difference perceptible by our Senses. Hence too we learn that all this Earth, when absolutely pure, is so fixed in the Fire, that it can bear its utmost Efforts, almost without any Alteration; but that nevertheless when it is mixed with the other volatile Parts of Vegetables, it is, together with them, carried up by the Fire, and is so far volatile. This we see both in the Soot generated by burning them in an open Fire, and the Parts which rise in Distillation in a close Vessel. We also farther observe, that there is not any volatile Part of Vegetables which renders Earth more volatile, than Oil; and that among the different Sorts of Oils procurable either by Nature or Art, none carries up more Earth with it in Distillation, than the last thick pitchy Oil, forced out by the ultimate Action of the Fire, and to this it seems owing that these Oils are so very heavy, the large Quantity of Earth which they contain, thus increasing their Weight. Hence, also, arises their great Tenacity, as is obvious from this, that these Oils, when the Earth is separated from them by Distillation, grow immediately very thin, light, and exceedingly volatile.

A pure virgin Earth is, also, obtained from fixed alkaline Salts;

for if we carefully examine that fixed alkaline Salt, which by the Water is washed away from the Earth of burnt Vegetables, we find that by repeated Solutions, Coagulations, and Calcinations, it yields a large Proportion of pure white Earth, exactly similar to that which remains in the Ashes. From this and other chymical Experiments 'tis obvious, First, that the common fixed alkaline Salts obtained from the Ashes of burnt Vegetables, consist in a great Measure of simple elementary Earth, which, whilst they are forming, enters their Composition. Secondly, that this Earth is so concealed and intermixed with these Salts so long as they retain a fixed alkaline Form, that it does not give the least Indication of itself by any Sign, since by Water, or the Moisture of the Air, it is so dissolved, as to be converted into an exceeding simple limpid Liquor. Thirdly, that this Earth of Vegetables can only be subtiliz'd to this Degree by the most violent Action of an open Fire, which, whilst it is thus consuming Vegetables, so intimately unites this Earth with another alkaline saline Principal, that from both an *Alkali* is generated. Fourthly, hence 'tis certain, that fixed alkaline Salts are not simple Bodies, but compounded of two perfectly distinct Principles, intimately united together. Fifthly, 'tis highly probable that this burning of Vegetables, after it has attenuated the Earth, combines it with that native Salt which was naturally in the Plant. Sixthly, hence we never find in Vegetables any Salt which is naturally fixed, since that which is so, owes its Existence to the Earth with which the Fire has combined it. Seventhly, hence the fixed alkaline Salts obtained from Vegetables, may be again resolved

into a pure simple and imperceptible volatile Salt, and a subtile, pure, inactive, and fixed Earth. Eighthly, from this Account of Earth 'tis far more probable that fixed alkaline Salts are generated from Earth and a saline Principle, than that Water, by being intimately united with Earth, should be converted into an Alkali, as some imagine; for tho' all the Methods of Chymistry are used to combine Earth and Water together, yet it has never appeared, that a fixed alkaline Salt has been thence produced, let the Fire be ever so intense. Ninthly, this Earth, therefore, which is always and every where the same, is extracted from Plants in great Quantities, with the Water, Spirits, volatile and fixed Salts, and Oils, when they come under the Management of the Chymist. Hence we are sufficiently certain of the Nature, of that Earth which is found in the Class of Vegetables, which as it appears to be every where the same in every Vegetable, constitutes perhaps an immutable Element.

Such an Earth is also to be found in the animal Kingdom; for if Animals after Death are exposed to a warm moist Air, they presently putrify, in a Heat less than that of a Man in Health; and by this Putrefaction, they are in a short time so much altered, that almost their whole Bodies are resolved into a fetid Matter, which is so volatile, as to be dissipated in the Air, leaving behind it a simple terrestrial and unactive Matter, exceedingly like the Earth obtained from Rain Water, and Vegetables.

The Juices, also, of all Animals, by a proper Treatment, yield an Earth of the same Kind; for any of the Humours of every Animal,

after

after by a due Circulation they have been changed from the crude Disposition they had when they were taken into the Body, being chymically treated, yield an incredible Quantity of Water, and a small Quantity of fixed Earth.

This Account of Animals and Vegetables, given with a View to discover the true Nature of Earth, shews us that these two Bodies greatly resemble each other in all their Properties, and in many of them, entirely agree. Hence, therefore, 'tis not surprising that Animals, by Means of their concoctive Faculties, can subsist entirely upon Vegetables, with the simple Addition of Water, and as this appears to be every where the Case, the Bodies of Animals seem in many Respects to be nothing but transmuted Vegetables.

The Union of elementary Earth with all the other Elements of Vegetables, is dissolved by no Action more easily than by that of Putrefaction; for no Vegetables after Putrefaction will, by the Action of Fire, yield a fixed Salt, for the oily and saline Parts recede, and are separated from the Earth, and the Salts are rendered volatile, like those of Animals. The same Effect is produced by the Digestion of Vegetable Food in the Stomachs of Animals, and thus Substances originally of the vegetable Kind, when assimilated to animal Bodies, yield no fixed Salt upon burning. This does not hold true of Fermentation; for tho' this last agitates Vegetables so powerfully, and for so long a Time, yet it is never able to free the elementary Earth from its Salt and Oil, as appears in Tartar, which yields a fixed Salt by Calcination.

Hence we understand the Nature of that elementary Earth, which enters the Compositions of Animals and Vegetables, as a true Principle

and in both these, this Earth seems to be perfectly of the same Nature, since little or no Difference appears in it. This no where is more evident than in the Cupels which are made as good from the Ashes of Vegetables, as from the pure Earth of Animals, whether procured from any of the Parts of Fishes, Birds, or Beasts. The Earth, then, answers the same Purposes in Animals and Vegetables, since it gives a firm Contexture to their Bodies, and affords a solid Basis for the Rest of the Elements; for these must all be united with this Earth, that by this Means they may be fixed and held together, and thus reduced to the Shape of any particular solid Body. This Earth alone gives all Bodies their proper Form, and when this is separated from them, they either sink into an irregular Mass, or being resolved and disengaged, become volatile, and are dispersed from each other. This Earth by its fixed and tenacious Nature, proves a proper Cement to bind, unite, and properly dispose all the other Parts among themselves, and thus hardens the Body arising from this Conjunction, so that it becomes capable of resisting the Air, Water, Sun, and some Degree of Fire, without any Inconvenience. But then, on the other Hand pure dry elementary Earth requires the Assistance of Water or Oil, as a Kind of Cement to hold together its separate Elements, and thus to form them into one Mass.

If whole Animals are burnt in an open Fire till they are consumed, there then remain no Parts of them but Ashes, which being pounded, exhibit an Earth exceedingly like the former, and free from all Oil or Salt. This cannot be distinguished from the Earth procured from Animals by other Operations, and serves entirely for the same Purposes in every Kind of Experiment.

Elementary Earth is, also, obtained from Fossils; for if we take the pure native Salts such as Nitre, Sal-Gemmæ or Sea Salt, dissolve them in clean Water, and digest them in Vessels accurately closed, they will deposite an Earth to the Bottom, which will not be dissolved in the Water. When the Liquor is thus depurated and grown exceedingly clear, let it evaporate in a Place free from Dust, till you observe a Pelticle on its Surface. Then remove it into a cool and quiet Place, and it will Shoot into little saline Glebes, of a particular Figure, which, when dissolved in Water, will also yield a small Quantity of pure Earth; and at last after this Crystallization and Solution has been repeated a great Number of Times, all the Salt will become volatile, be dissipated in the Air, and escape any further Notice of our Senses, leaving the Earth, with which they were firmly united, behind them.

Elementary Earth is, also, obtained from these native Salts by Distillation; for if we reduce any of the above Salts to a Powder, and mix them with three Times the Quantity of dry Clay, Bole, Brick-dust, or pure Earth, and urge the whole with the greatest Degree of Fire, they will by this Means be resolved into a liquid Part, which will be volatile, acid, and corrosive, and a fixed Part, which will remain at the Bottom of the Vessel, among the Earth with which it was mixed. If this fixed Part is depurated by boiling it in Water, letting the Water settle, and afterwards filtrating, and is then reduced to Chrystals, it will yield a Salt pretty much resembling that made use of in the Distillation, except that the Salt from Nitre will be in some Measure alcalinescent. And if the Salt thus generated is again dissolved, inspissated, and chrystallized, it will also produce a great

Deal of Earth of the same Nature with that which was procured from the original Salt. The acid Liquor, also, thus drawn from the Salt by Distillation, being again distilled in a clean Vessel, will leave some yellow Feces at the Bottom, which when dried, are also found to contain some Earth. These acid Salts are so volatile, when accurately freed from their Earth, as to fly off and be dispersed in Fumes, which can hardly be contained within their Vessels, so that it is not absurd to suppose, that all these acid Salts would not be at Rest in the Air, if it was not on Account of their latent elementary Earth, which being intimately united with them, fixes their Volatility and holds them down; and that when they are disengaged from their Confinement, they regain their proper Volatility. If fossil Alum is dissolved, crystallized, and treated in the same Manner as the Salts above mentioned, it also yields a great Quantity of Earth, and if this Earth is separated from its Salts, these become volatile. By dissolving some Vitriol in Water, and digesting it, we obtain a large Quantity of Earth commonly called *Ochre*.

Elementary Earth is, also, obtained from fossil liquid Sulphurs, and the Substances, produced from them, as *Asphaltus*, *Bitumens*, *Naphtha*, *Petroleum*, and the *Oleum Terræ*; for if these are exposed to an open Fire, take Flame, emit black acid Fumes, produce Soot and are quite consumed, there is found at the Bottom some Earth, which by being burnt to a Calx, affords a pure Earth, exceedingly like that obtained from Animals, Vegetables, and fossil Salts.

If true Sulphur is sublimed into Flowers in a close Vessel, it always leaves some Earth at the Bottom, tho' the Flowers thus obtained scarcely

scarcely yield any in a second Sublimation. But if with the purest Sulphur we mix, over the Fire, an equal Quantity of a pure alkaline fixed Salt, the Compound arising hence being put into a clean glass Bason, and exposed to the Air in a Place free from Dust, will soon dissolve into a Liquor, to the Bottom of which a great Deal of Earth will subside. And even the Oil itself which produces Sulphur in conjunction with the fossile Earth, contains, and will yield a pretty large Quantity of Earth.

Tho' some of the Moderns who have treated of the Analysis and Composition of Metals, mention an Earth which will vitrify, as entering their Composition, and which is the Basis of them all, yet this Substance does not at all answer the Characters, and consequently cannot deserve the Name, of Earth; Mercury, indeed, when brought fresh out of the Mines, and pressed thro' a thick Leather, seems to leave some Earth behind it; and if, when it is thus depurated, we distil it in a clean glass Vessel, it will leave a very small Quantity of Feces but this cannot properly be called Earth, because the genuine Properties of Earth do not appear to be in it. But if we examine all the other Metals with the greatest Accuracy, we find no Earth in them; for the Calxes of Metals always remain true Metals; and tho' they are insipid, inodorous, fine, and sometimes capable of being reduced to a Powder, yet by the Addition of some reducing Powders, they may be brought back to their original Form; whoever, therefore, looks upon these Calxes as true elementary Earth, may with equal Reason suppose that he is able to transmute Earth into Metal whenever he pleases. Besides, calcined Metals may by the Efficacy of Fire alone, or by the

Admixture of some other Substances with them, be converted into true Glass, which cannot be affirmed of pure simple Earth.

From what has been said, we may justly infer, First, That simple elementary Earth concurs as a constituent Principle in the Formation of the particular corporeal Fabric of Animals, Vegetables, and some Fossils of the less simple and durable Kinds. Secondly, That those Bodies which owe their Origin to the very same Earth, must, in this Respect, greatly agree with each other; nor do they only resemble each other with Respect to their Earth, but also, generally in the great Affinity there is between their other concurring Principles. Thus the Elements of Animals are continually changing into the Matter of Vegetables, whilst on the contrary, the Bodies of Animals are perpetually supported, and nourished, by the Vegetables they take in, and assimilate to their Natures, and which afterwards actually enter their very Make. Thirdly, That Bodies which owe their Origin to the same Earth, are easily transmuted into each other. Fourthly, Iron, which of all the Metals seems to come nearest the Earth of Animals and Vegetables, must be allow'd, also, to come nearest to Animals and Vegetables in Nature, and seems as if it could in some Measure be dissolv'd in them. Hence it yields a noble and safe Remedy for various Diseases of the human Body; whereas the rest of the Metals act with more Violence; for these, as they have not Earth, but Mercury, for their Basis, seem to remain immutable in all Bodies, and incapable of being digested by our concoctive Faculties. Fifthly, Earth principally furnishes the Chymists with their Instruments and Vessels; for all Kinds of Glass have a great Quantity of terrestrial Matter united

ted with their fixed alkaline Salts. Sixthly, pure Earth mixed in a proper Quantity with pure fixed Salts, prevents their running into a Mass when they are exposed to a strong Fire, which would certainly have been the Case had the Earth been away. Seventhly, pure Earth is, also of great Service to Chymists when they want to purify animal or vegetable Salts, from the Oil which tenaciously adheres to them, and renders them impure, for when these are exceeding foul with the empyreumatic Oil united to them, by the Admixture of pure Earth, they are, in a proper Heat, raised with an exceeding white Colour, and deposite all their Oil in the bibulous Earth. Eighthly, Earth, when mixed with a great many Substances, disposes them to discharge a flatulent Vapour, which otherwise, upon the Application of Fire, would make them puff up to such a Degree, that not being able to bear the Heat necessary for the Distillation, they would swell and rise in the Retort, so as to run over into the Receiver, and thus confounding every thing together, prevent the desired Effects of the Operation. Thus if for any valuable Purposes, a Person designs to distil Honey or Wax, he loses his Labour if he distils those two Substances by themselves. Ninthly, what has been said of elementary Earth is by no Means to be applied to common Sand, which is falsely taken for true Earth; for pure Sand, upon Examination with a Microscope,

discovers itself to be an Heap of small pellucid and multangular Crystals, every one of which is of a different Size and Figure. These, in Conjunction with a fixed *Alkali*, will easily run into Glass. The wise Author of Nature has dispersed these over the Surface of the Earth, that the fructifying Water may be able to insinuate itself thro' the Pores of the Ground, which would otherwise very easily unite and coalesce into one Mass, and by this Means in a short Time acquire a perfect stony Hardness, to the infinite Detriment of Mankind. Neither are we to confound elementary Earth with Boles or medicated Earths, since these are compound Substances, tho' by the utmost Action of Fire and Water, they approach nearer to the Nature of true Earth, but in that Case they lose their medicinal Virtues. But least of all are we to take for elementary Earth, that Earth on which we tread, and which furnishes us with the Supplies both of Health and Life; for this our Earth evidently contains pinguious Boles, medicated Earth, barren Sands, Pebbles, Water, Air, Oils, Salts, all the Elements of Animals resolved into their Principles, and all the Principles of dissolved Vegetables blended and confounded together. So that common Earth is so far from being a pure Element, that it is to be looked upon as a Chaos of all the natural Elements and the various Bodies compounded of them.

C H A P V.

Of A C I D S.

AN Acid is that Body which when applied to the Tongue, or the Nostrils, excites that Taste and Smell which every one calls Acid ; so that all those Substances are acid which are capable of exciting the Sensation or Perception of Sourness ; these consist of Particles highly rigid, long, subtile, and furnished with the most acute Spicula, by which Means they enter the Pores easily, stimulate the *Papillæ* of the Tongue, and affect the Organs of Taste. Acids are either *Manifest*, and fall under the Notice of the Senses, or *Disguised*, as when they are so sheathed up in oleous or earthy Particles, or so diluted with aqueous Fluids, that they are not perceptible to the Senses, but remain concealed, and disguised. Acids of the first Kind are simple and pure, whereas those of the second comprehend the various Degrees of austere and sweet Acids.

Acids are known from their Origin, Properties and Effects. With Respect to their Origin, they are either spontaneous and native, or factitious, and prepared by Art. The native Acid of the vegetable Kingdom is found almost in all Plants ; the austere, crude Acid in the Juice of unripe Fruits, and sometimes in the woody Parts, the Bark and Leaves of Vegetables ; whilst an Acid of the sweet Kind, which contains many oleous Parts, is found in some Fruits duly concocted and ripen'd by the Heat of the Sun, as in Cherries, Strawberries, Apples,

and many others. A simple Acid is, also, found in some ripe Fruits as in Citrons, Oranges, and Lemons. The native Acids of Vegetables, seem to be generated entirely from that Juice, which they draw as Nourishment from the Earth ; so that in this Respect, we may perhaps reduce them all to the Nature of Fossils ; especially because Plants growing in the Sea, without having their Roots affixed to any earthy Part of its Bottom, consist entirely of alcaliscent Parts, and in Distillation yield a volatile oleous Alkali. But as all Plants imbibe the Air at their Surfaces, 'tis possible they may receive a Portion of their Acid by this Means, from the Atmosphere. We have Examples of manifest vegetable Acids in Sorrel and other Plants, from which the Acids may be produced separate, without any Change in the Form of essential Salts, whilst the most liquid acid Juices, being expressed, strained, inspissated, and left at Rest, generate saline Crystals. Which of the latent or occult Acids may be rendered manifest by Art, will afterwards appear, from the factitious Acids, only we shall here observe, that the native Acid of Plants concealed in their expressed and soft Oils, such as that of Olives, for Instance, discover themselves by the solvent Effects they produce on metallic Bodies, not by any Virtue peculiar to these Oils, but by Means of a volatile Acid which adheres to them, and may be expelled by long boiling. That such an Acid is, also, contain-

ed in the distilled Oils of Lavender, Turpentine, and Juniper; is also demonstrated by an Experiment of *Hoffman's*, who by triturating these Oils with Salt of Tartar, they produc'd a neutral Salt, compounded of the Acid extracted from them, and the additional Alkali. In the distilled Waters of many Plants, the Acid, together with the oleous Parts joyned to it, remains concealed so long as these Waters continue limpid to the very Bottom of the Vessel, in which they are kept; but in the older distilled Waters, the Acid becomes sensible to the Taste, the oleous Parts being then separated and precipitated to the Bottom, in the Form of a viscid Matter, in which Case these Waters are said to be corrupted by Age.

Very few native fossile Acids are to be found. We indeed frequently meet with Exhalations which resemble a suffocating sulphureous Acid, and which, also, by other Marks discover the Acidity they contain; but such an Acid is very rarely found pure and alone, in the Form of a Liquor. As often, however, which frequently happens, as such an Exhalation meets with an hard Body capable of attracting its Acid, this Acid is united to it, is incorporated with it, and becomes fixed. But when this Acid is again extracted from the fixing Body, it sufficiently discovers itself to the Senses, and so far as we know, is in every Instance the same; for if it meets with pinguious fossil Substances, it produces various Species of Sulphurs, the Fume of which, when collected, refrigerated, and mixed with moist Air, yields a Spirit or Oil of Sulphur by the Bell. But if we distil this Acid from a pure glass Vessel, by exposing it long to the Heat of boiling Water, we obtain a considerable Quantity of pure Water, which from the Air, in burning the Sul-

phur, had insinuated itself into its acid Fume. In this Case there will remain at the Bottom of the Vessel a ponderous, thick and burning Acid, which in every Respect exactly resembles the purest Oil of Vitriol, except in this alone, that the former contains nothing of a volatile metallic Nature, more or less of which is always found in Oil of Vitriol. When this Acid corrodes calcareous Stones, and is concreted with them, it forms various Kinds of Alums, according to the Diversity of the Materials mixed with it. But all these Alums, when previously and gently calcined, are by the greatest Force of Fire, raised into Vapours, and yield a Liquor, which when artificially depurated, is entirely the same with that obtained from kindled Sulphur. When green native Copperas is, in a gentle Heat, dried to a whitish Powder, and then urged by the highest Degree of Fire, it emits white Clouds, which collapsing, yield a Liquor, which when accurately depurated, is the same with that obtained from Sulphur and Alum. But blue Vitriol when treated in the same Manner, yields a Liquor, which is the same with the former, and cannot be distinguish from them, provided it is artificially rectified.

Animals afford no manifest native Acid; for all animal Juices, left to themselves, always putrify, and do not become acescent, whilst all Acids taken along with the Aliments are by a sound Body, subdued and divested of their Acidity; so that alcallescent, putrid, volatile and fetid Salts are rather generated in Animals. Milk, also, drawn from the Breasts of a sound Woman is never acid, but always of a sweet and mild Taste. The Urine is, also, continually alcallescent, even in Persons who use large Quantities of acescent and acid Food and Liquors. Nor have the Excrements an acid, but rather

a putrid Smell, unless acefcent or acid Substances have been previously used. Nor is the Blood acid; for supposing a pure Acid to be, from the Aliments, conveyed with the Chyle to the Blood, it there immediately loses a Principle of an alkaline Nature, with which it engages, and assumes a neutral Quality, so as to be changed into a tartareous or an ammoniacal Salt. Much less are the other Liquors secreted from the Blood, such as Bile and Sweat, to be called Acids, since they are rather of an alcalescent Nature. But if any Acid is found in Animals, it is entirely formed by the Use of acid or acefcent Substances and by Reason of a Defect of the vital Force in Digestion, is deposited in the *primæ viæ* in the unconcocted Chyle, or in the mammary Vessels. Hence, in some Patients a Sweat manifestly of an acid Smell denotes the previous Use of Acids, and the languid Force of Nature. Hence if there is any other Acid than this in the sound Blood, or other Humours of Animals, which have been concocted by the Force of Nature, it is highly latent and involved in oleous Particles, and consequently cannot act as an Acid.

The factitious or artificial Acids latent in Vegetables, and obtained from them, are: First, A vinous Acid by Fermentation; and this is either a simple Acid, or an austere Acid, or a sweetish Acid, which are either liquid in the Form of Wine, or solid as Tartar. A simple Acid is also produced by Fermentation, in acefcent Meals, as is sufficiently known to Bakers. Secondly, A fermenting Acid, when Vegetable Juices are, in the very Act of Fermentation, or in the intermediate State between their native Condition and that which they acquire after the Fermentation is past, as is observable in recent Must, and Ale fermenting in a Bottle. Thirdly, an acetose Acid produced, by the second acetose Fermentation,

as in Vinegars. Fourthly, an Acid by Distillation from some Woods distilled by themselves from a Retort, by which Means they yield, first, an acidulated Water, and then, by increasing the Fire, an acid Spirit. The Woods of this Kind, are Guaiacum, the Juniper Tree, the Oak, the Box Tree, the Cedar, and some others, which yield a Spirit, acid like Vinegar, oleous, fetid, and empyrenmatic, which when, filtrated thro' Paper, becomes purer by leaving its adherent Oil in the Filtre; but it always remains empyrenmatic and pinguious, deposites an oleous Crust on the Sides and Bottom of the Vessels in which it is kept, and at last becomes pure by Rectification in a clean glass Vessel, with a gentle Fire. These acid Spirits are volatile acid Salts diluted with Phlegm, as is obvious from the Smoke produced in burning acid Woods, and the acid Soot generated by it. Of the same Nature is that purely acid Spirit obtained by Fire from the native Balfams, as Turpentine and Wax. From all Plants distilled with simple Water and urged with a great Fire we obtain an Acid, which is the Reason why distilled Waters prepared by mercenary Distillers, who endeavour to obtain too large Quantities, have an ungrateful nauseous Taste, and are possessed of anthelmintic Qualities, in Consequence of the Corrosion of the Copper of the Still, by the Acidity of the last Water. Fifthly, an Acid by burning Pieces of Wood, especially such as are green, from the Extremities of which laid upon a large Fire, whilst the Middles of the Boughs are agitated by the Fire, flows a Liquor like a frothy Water, which is a pure Acid, highly resembling that which naturally exists in most Trees, and consequently is a native Acid. Sixthly, an Acid is obtained from the expressed Juices of Plants by crystalizing them into their

their native or essential Salts. But none of these Acids can ever be obtained pure, but are always mixed with other Parts, especially those of the oleous and aqueous Kinds.

Acids obtained from the fossile Kingdom are rarely found in a Solid, but almost always in a liquid Form; among these are the Acid of Sulphur, otherwise called the Oil or Spirit of Sulphur by the Bell; the Acid of Alum expressed by the greatest Force of Fire, and generally called the Oil of Alum; and the Acid of Vitriol, by the greatest Violence of Fire, forced into a Spirit commonly called the Oil of Vitriol. These three Species of Acids duely defecated, seem to differ but little from each other. They are indeed with the greatest Difficulty deprived of all Water, and if they should be totally divested of it, they forthwith attract the Water, from the Air as strongly as fixed alkaline Salts, calcined by the greatest Fire. The other simple fossile and acid Spirits are, the acid Spirits of Nitre and Sea-Salt, which always remain fluid, because the Water cannot be separated from them, since they are so volatile, that by the Degree of Fire requisite to separate the Water, they themselves fly off; *Aqua Fortis* and the *Spirit of Nitre* are much the same, Spirits of Sea-Salt, Fountain-Salt, and *Sal-Gemmæ*, are esteemed the same; whence 'tis obvious, that there are very few simple fossile Acids. Perhaps the only Instance of a true Acid being obtained in a solid saline Form, is in the Salt of Amber. According to *Homberg*, the acid Spirits of Fossils and Plants, are no more than volatile Salts resolved in a certain Quantity of aqueous Liquor, with which they are carried over in Distillation, but when they are disengaged from this aqueous Liquor, they appear in the Form of concreted or crystalliz'd Salts,

which, when thrown upon live Coals, fly off in Smoak, without leaving any Feces.

From the animal Kingdom we obtain an Acid. First, when Milk drawn from an Animal fed with acescent Vegetables, is kept in a warm Place; for in such a State it grows more and more acescent, as is obvious from four Milk, four Whey, and Butter-milk. Secondly, we find an Acid in the Spirit of Ants, if these are distilled with their Beds, which consist of the Leaves and other Parts of Plants. But this acid Spirit does not derive its Origin from the Ants, but from the Vegetables, since from the Ants distilled alone, we obtain a Spirit, somewhat fetid, but not acid. Thirdly, From distilled Bees we, also, obtain an acid Spirit, which however is not yielded by the Bodies of the Bees themselves, but by the Wax and Honey they contain, and which are vegetable Substances. Fourthly, the small Quantity of Acid which by the most exquisite Torture of the Fire is obtained from Blood is, according to *Homberg*, either the acid Spirit of Sea-Salt, mixed with Earth, and procured by the greatest Fire; or if the Blood of an Animal which does not Use such a Salt should yield an Acid without the Addition of any other Substance, this Acid must be separated from the pinguious and earthy Principle, with which it was intimately united.

The most considerable artificial Acids mention'd by Authors, are Vinegar, Spirit of Nitre, *Aqua Fortis*, Spirit of Sea Salt, and Oil of Vitriol. But because these Acids can hardly ever be obtain'd pure and free from all adherent Water, we shall from the celebrated *Homberg*, lay down the Method of discovering the Quantity of true Acid, contain'd in any given Liquor. For this Purpose saturate Salt of Tartar with the acid Liquor, then exhale

or evaporate the Phlegm, in which the acid Salt was dissolv'd, which being now retain'd by the saturated and dried Salt of Tartar, increases the Weight thereof. And from this Augmentation of Weight, we know the Quantity of true Acid, contain'd in the acid Liquor pour'd upon the Salt of Tartar. Thus according to *Hornberg's Experiment*,

One Ounce of Salt of Tartar absorbed all the Acid from fourteen Ounces of the best distilled Vinegar; and hence, after it was dried, it was increased in Weight three Drams thirty-six Grains; the remaining Part of the Vinegar was meer insipid Water. By this Means, then, we discover the Proportion there is between the Acid, and the Water of the Vinegar.

The same Quantity of Salt of Tartar absorbed all the Acid from two Ounces five Drams of Spirit of Salt; the Increase of Weight, when dried, was three Drams, fourteen Grains.

An Ounce of Salt of Tartar absorbed all the Acid from one Ounce, two Drams, thirty-six Grains of Spirit of Nitre; the Increase of Weight was three Drams, ten Grains.

The same Quantity of Salt of Tartar absorbed all the Acid from one Ounce, two Drams, thirty Grains of Aqua Fortis; the increased Weight was three Drams, six Grains.

From five Drams of Oil of Vitriol, an Ounce of Salt of Tartar absorbed all the Acid; the increased Weight in the dried Salt, was three Drams, five Grains.

As these are the principal Acids, we may infer, First, That in acid Liquors, tho' various with respect to their Bulk, whilst united with their Water, yet the acid Principle has nearly the same Weight in all. Thus Vinegar, which is the highest of all these Acids, increased the Weight of the same Salt of Tartar, as much as the Oil of Vitriol, which

is the heaviest and strongest. The same too is true with respect to the other Acids, the Difference between the greatest and least Increase of Weight, being no more than thirty-one Grains, and only in the Vinegar, and this because the *Tartarus Regeneratus*, that is, the compound Salts formed by the Union of the Salt of Tartar and Acid of the Vinegar, is not dried without a vast deal of Difficulty.

Secondly, Acids seem to differ principally as to the Quantity of Water they are diluted with, since the pure Acid when it is attracted, discovers always the same Weight. If fourteen Ounces, therefore, of the strongest Vinegar could by any Contrivance be reduced to five Drams, by separating the Water from it only, and collecting the Acid into a smaller Compass without altering it; it is possible, that Vinegar thus reduced in Bulk, would be as strong as Oil of Vitriol. It is however certain, that it would be then capable of saturating the same Quantity of alkaline Salt.

Thirdly, We have perceived, how great a Part of these acid Liquors, is Water.

Fourthly, It is probable, that if these acid Salts could be obtained pure without Water at all, they would then appear in a solid Form. This, however, has never yet been accomplished: Very intense Cold has come nearest it of any Thing, but not quite compleated it. Hence also, we may conceive what surprising Effects *alkaline Menstruums* may produce, when they act upon Substances that have any latent Acid in them, or upon those that are actually consolidated, and held together by an Acid; and hence, when this Acid is absorbed, they fall again into their constituent Elements.

The common Properties, or Effects, by which Acids are known,

are

are these. First, Acids once generated, are scarcely alter'd in the the Fire, even tho' long continued; for by an Observation of *Homburg*, Aqua Fortis, Aqua Regia, Spirit of Nitre, Spirit of Salt, and Oil of Vitriol, digested for four Years in Glasses hermetically seal'd, by Means of the equable Heat of an *Athanas*, retain'd the same solvent Power; only the distill'd Vinegar became almost insipid, and acquir'd an aromatic Smell. The Spirit of Salt began to corrode the Glass in which it was contain'd; and a great Part of the Oil of Vitriol which was next the Fire, was form'd into Crystals as it cool'd. Secondly, The Strength of Acids is as their Weight, on Account of their true Acid mixed with the Water, so that the heaviest Acids are accounted the strongest. Thus fossil Acids are heavier, and consequently stronger, than these of the vegetable Kind. Hence one Acid exerts the Power of an Alkali with respect to another, since the stronger is receiv'd by the weaker, as it were by an alkaline Salt; but the Acid of Vitriol is of all others the strongest. Thirdly, All Acids may be diluted with common Water, and consequently so weakened, that the most corrosive acid Poisons may be converted into the most salutary Medicines. Fourthly, Acids may be united with inflammable Spirits, as the Spirit of Nitre with *Alcohol*, which upon Mixture excite a great Heat, emit red Fumes, and produce a terrible Effervescence. Fossil Acids united with Spirit of Wine, by Digestion, or Distillation, are weaken'd and dulcified; an Instance of which we have in the Shop Preparations, commonly call'd, the *Spiritus Nitri Dulcis*, and, the *Spiritus Salis Marini Dulcis*. Fifthly, Acids may be also united with Oils. Thus Spirit of Nitre, may be mix'd with some di-

still'd Oils, during which a great Heat, and sometimes a lucid Flame are excited. But when Acids are united with oleous Liquors, they always produce a Substance of a bituminous, pitchy, or sulphureous Nature. Sixthly, Acids pour'd upon the Flowers of Mallows, the Syrups of Violets and, Roses, but especially upon a Solution of Heliotropium, or upon blew Paper, immediately turn them of a Colour more or less red, according to the Quantity and Quality of the Acid. Seventhly, Acids mix'd with an oleous Principle, quickly produce a Liquor of a redish Colour. Eighthly, All fluid Acids added to earthy alkaline Substances, call'd Absorbents, and to alkaline Salts, whether of the fix'd, or volatile Kind, produce an Effervescence with them, dissolve them, and in Conjunction with them form a neutral Substance. Ninthly, Acids added to Solutions, made by *Alcalies*, frequently cause a Precipitation. Tenthly, Acids produce an Effervescence with Metals, and other Minerals; all Acids, however, do not equally affect all Metals and Minerals, but some act more strongly with some, and others more faintly. Eleventhly, Acids dissolve the solid Parts of Animals, as Horns, Hoofs, and Bones. Twelfthly, Acids coagulate Milk, and the Whites of Eggs. Thirteenthly, Strong fossil Acids put a Stop to Fermentations. Fourteenthly, Strong Acids applied to the solid Parts of live Animals corrode them, and induce a yellow Spot, but when applied to nervous Parts, excite convulsive Motions. Fifteenthly, Acids resist Putrefaction, and when applied to putrescent Substances, as the Flesh of Animals, preserve them from Corruption. Sixteenthly, Different Acids taken into the human Body, excite a certain Stimulus in the Solids, with Forces and Effects peculiar to themselves.

selves. Lastly, Acids are more slowly congeal'd than simple Water, and require a greater Cold for that Purpose.

As for the Use of Acids in Medicine, 'tis certain, that there is a great Difference betwixt the Strength of vegetable and fossil Acids. Hence these last, are for the most Part only employ'd for external Use by Surgeons, when they want corrosive and caustic Medicines; but cannot be exhibited internally, till they are diluted with aqueous Liquors, or dulcified with Spirits of Wine. And as vegetable Acids are of various Kinds, and different Virtues, so nothing concerning their Use in Medicine, can be advanced, which is equally applicable to them all. However, that we may be enabled to form as just an Opinion of their Effects, as possible; we shall observe, that some are afraid of Acids, on Account of their corrosive and dissolving Quality, whilst others are apprehensive of their Strength and coagulating Virtue. Both are in the right, if their Opinions are understood, with a due Restriction. As all fossil Acids are of a corrosive Quality, we shall say no more of them, but confine ourselves to vegetable Acids, which, as they are weaker than the former, may consequently be more easily subdu'd, by the digestive Powers. But 'tis carefully to be observ'd, that vegetable Acids, obtain'd from the very same Plant, often produce widely different Effects; for, we must accurately distinguish between astringent, and resolvent Acids; thus there is a resolvent Acid in ripe Summer Fruits, which when eaten copiously, prove purgative; whereas, before they are ripe, they contain an astringent Acid, which produces Costiveness, and all the Diseases arising from a Constriction of the capillary Vessels, and a Coagulation of the Fluids, of

which Kind, is a particular Species of Itch, to which the poorer Sort of People are subject, on Account of their eating sour and unripe Fruit. Among vegetable Acids, therefore, we find that the *Omphacium*, or Juice of unripe Grapes, is astringent, whilst that of such as are ripe, so resolves the Humours, as to induce fatal Diarrhæas, and Choleræ. This Juice of ripe Grapes, when fermented, produces Wine, which when recent, is still more resolvent, and at the same Time hot and productive of Commotions; but old Wine is not resolvent, tho' it becomes more hot. Of Wine, is prepar'd Vinegar, which is still more resolvent. But as the moderate tho' daily Use of Vinegar, cannot be prejudicial to Health, when subdued, and chang'd by the concoctive Powers; so the immoderate Use of it produces those Disorders which arise from a predominant Acid, and which are either produc'd by the too copious Ingestion of acid Substances, or by the languid Condition of the concoctive and digestive Powers. The celebrated *Helmont*, justly informs us, " That " in any other Part than the Sto- " mach, all Acidity is preter-natu- " ral, and unfriendly; for that in " the Intestines it produces Gripes; " in the urinary Passages, a Stran- " guary; in Ulcers, a Corrosion of " the Parts; in the Skin, the Itch; " and in the Joints, the Gout.--The " Truth of this Assertion, subjoins the " Author, is evinced from this, that " recent Urine discharged without " any Pain, produces great uneasiness " in the urinary Passage, when " mixed with a few Drops of tar- " tish Wine, and injected with a " Syringe." Disorders, also, frequently happen in the Stomach, from a redundant Acid, as is obvious from the Heat, Uneasiness, pungent Pains, difficult Concoctions,

acid Eruptions and Vomiting with which it is afflicted. When, therefore, 'tis certain that an Acid predominates in the Body, we may, from what has been said, discover what Medicines are to be opposed to it; that is, aqueous Diluents, mitigating and obdusting Substances, mild oleous Medicines, Alterants, earthy Absorbents, and saline alkaline Substances.

If in sedentary Persons the Humours are disposed to Acidity, the Disorder is more properly removed by due Exercise, than by the Exhibition of alkaline Salts, by which the Humours are no less resolved, than the Fibres corroded and abraded. For Persons afflicted with acid Eruptions, the Antients ordered Vomiferation. It is absurd to assert that all Disorders have a peccant Acid for their primary and fundamental Cause, since different Acids produce different Effects, and since the animal Functions, when too vigorous, spontaneously dispose to Diseases arising not from Acidity, but from Alcalescence and Putrefaction. Besides, 'tis certain from Experience, that Acids not only prevent, but also cure many Diseases; for when the Body is over-heated; and the Motion of the Blood preternaturally accelerated, Acids are so far from being injurious, that they excellently allay the Heat and Thirst, excite a keen Appetite, and procure a laudable Digestion. Acids, also, resist Putrefaction, and change the alkaline Salts of the Body, into those of a neutral, mild Kind, which greatly contribute to the Preservation of Health. Hence nothing is more efficacious for guarding against the Contagion of malignant Diseases, than Acids, of which Wine Vinegar and Lemon Juice are the most considera-

ble for this Purpose. Acids frequently prove beneficial to dropical Patients, both on Account of their stimulating Quality, and because they change the putrid Salts into those of a compound neutral Nature, which excellently resist Putrefaction. Mild and grateful Acids, such as ripe Summer Fruits, are proper in Apostems of the Lungs, or Empyemas. As Acids moderately used contribute to Health, so when taken to Excess, they are highly injurious; but in a particular Manner both Meats and Drinks of an acid Kind, are prejudicial to those who have weak Stomachs, in which the Juices easily turn acedent, are long retained, and do not pass duely off by Stool. Among Persons of this Kind are Children, old Persons, those exhausted by previous Diseases, or Grief, but especially hypocondriac, and gouty Patients, hysteric Women, and Persons labouring under Disorders of the Head, or Spasms. All these are greatly injured by ripe Fruits, which contain a large Quantity of Acid, and which by Fermentation, are changed into acid Juices. Some by taking a small Quantity of any Acid, such as rhenish Wine, immediately perceive an Uneasiness in their whole Bodies; and 'tis remarkable, that some Persons who have Issues, soon after the Use of Acids, perceive a Pain and Itching in these Parts. Acids are always prejudicial to the Bones, so that in spreading and malignant Ulcers 'tis an absurd Practice to apply Acids, in order to prevent a Caries of the Bones. 'Tis customary with some to Use highly acrid Acids in order to beautify the Teeth, which by this Means are soon rendered dull, torpid, and so loose that they drop out.

C H A P VI.

Of A L C A L I E S.

THE Name of *Alkali* was originally given to the Salts of Vegetables procured by burning them, from *Kali* a Word well known in the East and in *Egypt*, which signifies a certain Herb replete with Salt, which grows about the Sea Shore, and the Banks of the *Nile*, and also those of the celebrated River *Belus* in *Syria*, as *Pliny* assures us from the Testimony of antient Authors. This Plant, if burnt when it arrives to its full Growth produces Ashes, remarkable for their salt and acrid Taste, an Evidence of its abounding with Salt. When these Ashes are boiled in Water, they yield a strong acid salt Lixivium or Lye consisting of the Salt communicated by them to the Water which being properly separated, there remains a greyish Part, which will neither dissolve in Water, nor burn in the Fire, but is perfectly insipid, and of the Nature of Earth. If this Lixivium or Lye is evaporated to a Dryness in an Iron Vessel, a white solid Mass, of a most acrid caustic Taste and perfectly soluble in Water, is left behind. This Salt only is properly an *Alkali*; but because other Bodies produce much the same Appearances upon being mixed with Acids, all Substances that raise an Effervescence with Acids have been called *Alcaline*; as the volatile Salts of Animals, those procured from some acrid Vegetables, and those arising from putrified Vegetables, in Distillation. And not only alkaline, fixed, and volatile Salts, but also some other Bodies produce almost the same Ef-

fects with Acids. Hence we generally refer to the Number of Alkalies, First, such Substances as are purely of an earthy Nature, such as Lime, Marble, and the seald Earths. Secondly, stony Concretions formed in the Bodies of Animals, such as the Stone in the human Bladder, Bezoar Stones, and Crabs Eyes. Thirdly, testaceous Substances, such as Pearls, Oyster Shells, the Bone of the Cuttle Fish, the Claws and Eyes of Crabs. Fourthly, those Parts of Animals, which in Process of Time have assumed a Stony hardness, or are changed into Earth. Fifthly, all Plants of a stony Nature, or Sea Lithophytes, as Coral, all which Substances are called Absorbents, or earthy Alkalies. Sixthly, to the Class of *Alcalies* also belong metallic Substances. But this Property of uniting and producing an Effervescence with Acids, is not the peculiar Characteristic of alkaline Substances alone; for all distilled Oils produce an Effervescence with Acids, which is sometimes so strong as to excite a Flame, which never happens in the Admixture of Alkalies with Acids. These Oils, also, after the Effervescence, yield a Substance concreted of themselves and the Acids; but by this very Circumstance they are distinguished from Alkalies, because, like, these they do not produce a saline Substance capable of being dissolved in Water; but only a resinous or bituminous Matter.

With Respect to genuine *Alcalies*, as all our physical Knowledge of Things

Things depends upon the Discoveries which our Senses make in natural Bodies, hence all their Characteristics must be taken only from such sensible Signs thus discovered. Nor are we able to distinguish Bodies in any other Manner. The following Characters, therefore, of an *Alkali*, may be laid down as genuine, and sufficient for the Purposes both of the Chymist, the Philosopher, and Physician.

First, A fixed *alkaline Salt*, is produced from a vegetable Substance.

Secondly, It is only prepared from a Vegetable by the Action of Fire, which converts it into Ashes.

Thirdly, When it is thus prepar'd, it will remain a considerable Time in the Fire, thus demonstrating its Fixity.

Fourthly, In a moist Air, it perfectly dissolves, and deposites some Fæces, being impatient of a continued Dryness, if any Part of the Air has Access to it.

Fifthly, It impresses an acrimonious Taste upon the Tongue, somewhat caustic, and it excites a Taste of Urine, on which Account these Salts have, though not very properly, been call'd *urinous Salts*. For the Taste of this Salt does not resemble that of Urine, at the first Application. But when this has been in the Mouth some Time, and by its Stimulation caused a Discharge of the Saliva, then the neutral animal Salts which are in the Saliva, deposit all their Acid on the fixed *Alkali*, and thus becomes volatile and *alkaline*, and then impress upon the Tongue a disagreeable urinous Taste, of which this is the true Origin.

Sixthly, This Salt, when it is perfectly pure and without Mixture, has not the least Smell, being extremely fixed, even in the Fire. But as it attracts every Acid, if it meets with any Body, which contains a volatile *alkaline Salt*, fixed by an Acid, and

therefore without any Smell, it then immediately absorbs the Acid, and the *Alkali* being by this Means disengaged, and rendered volatile, affects the Organs with an *alkaline* Smell, which is falsely ascribed to the fixed Salt. This appears evidently upon mixing a fixed *alkaline Salt* with warm fresh Urine, upon which the Liquor that was inodorous before, instantly emits a disagreeable *alkaline* Smell.

Seventhly, Another Property of this Salt is, that when mixed with any Acid whatever, it immediately produces an Ebullition and Effervescence; and afterwards is so intimately united with it into one Mass, that if the Saturation is complete, the Compound discovers no Sign either of an *Alkali*, or an Acid; but there is always by this Means produced a Salt of another Nature, which is usually called *neutral*.

Eighthly, If a pure fixed *Alkali* is mixed with the Juice of the Turnsole, Roses, or Violets, it presently changes their natural Colour, which is a Kind of Purple, into a Green.

Ninthly, When this *alkaline Salt* is applied for some Time to a human Body that is warm, and consequently exhales some Moisture, it excites an acute Inflammation, attended with all its Symptoms, which soon becomes a grey, hard, dead, and often black Eschar; it is therefore capable of producing a true Sphacelus, or Mortification.

Tenthly, All these Salts have the Faculty of deterging and cleansing, which is not the Case with respect to those call'd *neutral*. These, then, are the Marks by which fixed *alkaline Salts* may be known and distinguished from all others; and by these we shall be able to avoid Confusion.

Such *alkaline* fixed Salts may be procured from any crude, fresh Vegetables burnt to Ashes, and treated in the Manner above-mentioned. But some

some Plants by this Management, yield a very small Quantity. Such are those, which, when crude, have a pungent Smell, which strikes the Nose, and makes the Eyes water; for almost all the Salt of these Plants being volatile, is dissipated by the Heat of the Fire. Garlic, the bulbous vomiting Roots, Onions, Scurvy-Grass, Lady's-Smock, Rockets, Hedge-Mustard, Cresses, Radishes, Rapes, Squills, Leeks, Mustard, and the like, are of this Class, in which Nature has so far perfected their *alcaline Salts*, as to render them volatile, as in Animals.

These lixivious acrid Salts, have been known to the Antients in almost all Ages of which we have any Account. *Aristotle* tells us, that the Ashes of burnt Reeds and Bulrushes, boil'd in Water, yield a plentiful Salt. And *Varro*, informs us, that some People about the *Rhine*, having neither Fossil, nor Sea-Salt, instead of those made Use of a salt Coal, which they prepared from some Sorts of Wood, burnt: From which it is plain, that they knew a Method of preparing these Salts, not unlike that of *Tachenius*, so as to make them less acrid, and to come nearer to the Nature of the native *neutral Salt*. Hence *Pliny* asserts, that Ashes have the Quality of Salt, but are milder. And that the burnt Fæces of Wine have the Virtues of Nitre (the antient Nitre.) And in another Place, he speaks of the Nitre produced from burnt Oak, which, he says, yields but a small Quantity, *L. 31. C. 10.* We farther learn from *Pliny*, that Ashes were in his Time used medically, and the Lixivium made of them drank as a Remedy. All these Authorities, to which more might be added, sufficiently evince, that the Discovery of *Alcalies* is not so modern as some imagine.

No native Salts have yet been discovered, with which the preceding

Characteristics agree, *alcaline Salts* being procured from vegetable Substances only, by the Action of the Fire. But since the first Calcination of Vegetables that ever happened in the World, these Salts have been produced. Hence therefore, in all Ages and Places where this has happen'd, there must have been a prodigious Quantity of this Salt generated, which always is at last, together with the Ashes, returned to the Earth. In the Revolution, therefore, of such a Number of Years, the whole Earth must have been converted into this Salt, provided it was immutable. But this is not the Case, for these Salts, when committed to the Earth, render it indeed fruitful, but then they change their *alcaline* Nature, and, imbibing the Acid of the Air, become *neutral Salts*, and act as such.

It is farther remarkable, that no Plant which ever grows upon the Surface of the Earth, if it was suffered to become dry, carious and rotten, would ever yield a single Grain of a fixed *Alkali*; but on the contrary, they are always either dissipated into such minute volatile Particles, as escape the Notice of our Senses, or leave behind them a Substance, which upon Examination appears to be simple Earth. This Experiment, therefore, confirmed universally in all Ages, evidently demonstrates, that Nature never produces a fixed *alcaline Salt*, either in the Solids, or Fluids of Vegetables.

Hence it is certain, that fixed *alcaline Salts* have their specific Nature imparted to them by Fire, and not by any natural vegetable Operation. But this is still farther evinced by the following Experiment, which never fails to succeed in the same Manner: Take any Vegetable, which, if burnt, would yield a large Quantity of a fixed *alcaline Salt*, let them be reduced to Putrefaction by Art, so that

that their whole Substance shall be perfectly putrified, they will then be rendered exceedingly foetid, and a great Part of them volatile, and, if they are burnt in an open Fire, will not yield the least Portion of a fixed Salt, but what remains will be a perfectly insipid Earth: If therefore we view this Experiment in a just Light, we must be of Opinion, that fixed *alkaline Salts* are as much the Creature of Fire, as Glass, which no Body ever suspected to be a vegetable Production; tho' vegetable *alkaline Salts* enter its Composition, and are necessary to its Existence.

It must, also, be remarked, that these *alkaline Salts* are capable of being resolved into a considerable Part that is saline, hard, bitter, and almost vitrescent; into a simple Earth; and into an *alkaline Salt*, that is stronger and more pure: And thus we may observe, that these *alkaline Salts* are no simple Bodies, but that they are compounded of different Parts united together; and that the Conjunction of their Principles into one Mass, which has the Appearance of being homogeneous, is effected by the Strength of the Fire. Hence it will follow, that Nature never acts by fixed *alkaline Salts*, as by her proper Instruments, unless when they are received first prepared by the Fire. And that even then, when she makes Use of them, thus prepared, in bringing about her Purposes, she only operates by them, as they are compounded of the three above-mentioned Principles; to which, however, as a fourth Part, there still seems to remain a Portion of Oil, as many Arguments evince.

Hence it appears, that as these fixed *alkaline Salts* are rendered more and more simple by a Separation of their constituent Parts, the Salt that thus arises will be continually different; for that which remains after a

Separation of some of its Principles, will always be of another, and more simple Nature, and consequently will have a different Power of acting. Thus in Pot-ash, which yields the best *Alkali*, a considerable Part of it, is a bitter, hard, pellucid Salt, which does not very readily dissolve in Water. If this is carefully separated from the rest, a purer *Alkali* is obtained, fitter than the former, before this Separation, for many Operations that are performed by *Alkalies*.

It is farther to be observed, that these *alkaline Salts* may be greatly altered by the casual Admixture of some other Body, whilst the Vegetables are burning, which being also of a fixed Nature, may be united with them, and remain in the Ashes; suppose, for Instance, that Nitre should happen to be among them; then, this being fixed with the other vegetable Salt, would produce an *Alkali*, to which, if Oil of Vitriol was added, it would emit a foetid Fume, that would in Smell resemble Spirit of Nitre, which never is the Case, if the *Alkali* is pure. The same is true, with respect to Sea-Salt, and many others. And lastly, We must take Notice, that the very Burning of Vegetables, as it is performed in a different Manner, will produce different Salts; for it is a known Truth, that if the same Vegetable is burnt in a strong brisk Fire, it will yield a Salt different from what is produced by burning it in a slow smothering Fire.

Amongst *alkaline Salts*, the most common is, that which is usually called *Pot-Ash*. This is imported in great Quantities from *Courland*, *Russia*, *Poland*, and other Parts of the North, where it is prepared from the Wood of green Firs, Pines, Oaks, and others of the like Nature, of which they make large Piles in proper Trenches, and burn them till they

they are reduced to Ashes. These are immediately sifted, and were by the Antients called *Lix*, by the Moderns *Cineres Clavellati*, a Name taken from the *Clavi*, Billets, into which the Wood is cleft, to make it burn the more readily. These Ashes are then dissolv'd in boiling Water, and when the Liquor, which contains the Salt, is depurated by subsiding, it is poured off clear, and makes a Lixivium. This is immediately put into large Copper Vessels, and is there boiled for the Space of three Days and Nights, till at last a Salt is left, which takes the Name of *Pot-Ash*, from the Pots the Lixivium is boiled in. This Salt whilst it is hot and dry, must be put up in Casks, made of dry Wood, and which is not impregnated with Oil of any Kind; and by this Means it may be preserved dry; otherwise, if it is exposed to the Air, especially one that is moist, it will run into a pinguious *alkaline* Fluid, exactly like Oil of Tartar *per Deliquium*.

By the Manner in which these fixed *alkaline* Salts are produced, one would not suspect them to contain any considerable Quantity of Earth, and yet upon Examination, we find they yield a great deal, even after they have been rendered as pure as it is possible to make them.

The Properties of fixed *alkaline* Salts, are as follows:

They attract Water very powerfully, and at a great Distance, and from every known Body in which it resides. This is plain to the Eye, for when such an *Alkali* is taken out of a strong Fire, if it is suffered to remain in a very hot Air, close by the Fire, where Water can by no other Art be discovered, it will even there grow moist, and dissolve: And if it is then put into a clean, dry, glass Vessel, and dried over the Fire, and the Vapour that exhales, is re-

ceived, and condensed in an Alembic, it will yield again the pure Water which the *Alkali* had attracted. Other Salts, if moist before, would have been deprived of their Water in the very same Degree of Heat, and the same Place where the dry *Alkali* attracted Moisture. These *alkaline* Salts, therefore, are true Magnets to Water; by this they are dissolved, and are strongly united with it; and hence, when they are once dissolved in Water, a Heat equal to that of boiling Water will not perfectly dry them again.

But to come to a more accurate Knowledge of this Attraction of Water by *alkaline* Salts, Boerhaave took a large glass Bottle, very clean, and dry, and hot, as if it had just been taken out of the Glass-house-Oven. Into this he put some pure Salt of Tartar, very hot and dry also, and reduced to Powder, in the Manner above described. He then immediately stopped the Mouth of the Bottle with a dry Cork, and tied over it a Hog's Bladder softened with Oil, and made very supple: The Effect of this Experiment was, that the Salt which adhered to the Sides of the Glass, was grown moist with the Water contained in that small Quantity of Air included in the glass Bottle, tho' the Air was extremely hot and dry, at the Time that the Bottle was closed.

It has not yet been determined with any Degree of Certainty, whether fixed *alkaline* Salts repel Air, or attract it so strongly, as not to part with it again readily. Experiments that have been made with this View leave the Thing dubious. It is very certain that Oil of *alkaline* Salts *per Deliquium*, examined by the Air-Pump, gives not the least Indications of containing Air, since none is separated from it, when the Pressure of the Atmosphere is taken away, even tho' the Oil is made very

hot in Order to expel the Air. On the contrary, it is equally certain, that when *alkaline Oils per Deliquium*, are mixed with Oil of Vitriol, from which the Air has been extracted by the Air-Pump, a surprising Quantity of elastic Air is produced, or, as it is called, generated. Upon considering these Circumstances, it appears most probable that fixed *alkaline Salts* actually attract Air, and unite it with themselves so strongly, that it is not to be dislodged, till the Texture of the Salt is destroyed by the Effervescence upon mixing it with an Acid.

These pure, acrid, fixed, *alkaline Salts*, if they are mixed with the purest *Alcohol*, when they come very hot out of the Fire, attract it, and unite with it; but if there is the least Mixture of Water, either in the Salts or the *Alcohol*, then the Salts repel the *Alcohol*, nor can they be united by any Art whatever. In this Manner, therefore, pure, fixed *alkaline Salts* divide strong Spirit of Wine into two Parts that, are not afterwards miscible with each other, that is, into a Water saturated with the *alkaline Salt*, and into a pure *Alcohol*, which swims at the Top. And thus, again, plainly appears the reciprocal Attraction betwixt Water and fixed *alkaline Salts*: Take a Pint of the purest *Alcohol*, mix with it a small Quantity of Water, and then a dry *alkaline Salt*, and the *Alkali* will in an Instant draw into it that little Portion of Water, and will appear in the Form of a thick Oil, about the Sides; and, at the same Time, the Combination of the *Alcohol* and Water will be utterly prevented.

These *alkaline Salts* act also upon vinous Spirits in another Manner; for, as every Spirit drawn by Fire, from Wine of any Sort, has always a volatile Acid intermixed with it, the Acid being greedily attracted by

the *alkaline Salts*, the Spirit by this Means becomes much more pure, when freed from the Acid which adhered to it, and consequently will be very different, both in its Nature and Virtues, from what it was before this Operation. And the *Alkali* itself will also, at the same Time, be entirely altered, and become a Salt compounded of an Acid and an *Alkali*, insomuch that, if it is perfectly saturated in this Manner, a Salt perfectly *neutral* will be produced.

These Observations direct us to a Method of preparing a pure *Alcohol*, without Distillation, or any Assistance from Fire; for add a sufficient Quantity of *Pot-Ash* to common Spirit of Wine, and stir them about till they are thoroughly mixed together, the Water will be attracted by the *alkaline Salt*, and the *Alcohol* will swim at the Top, which, by a gentle Decantation, will come off good at the first Time. If any Doubt remains, whether it is quite pure, or not, put some more *Pot-Ash* into the *Alcohol* thus prepared, and by stirring them about, and then pouring the Liquor off, as before, it may be rendered so. In this Operation, however, the Spirit of Wine always discovers an Oil, which before appeared neither in the Spirit of Wine, nor the *alkaline Salt*, but is generated when they are thus mixed together.

Another Property of *alkaline Salt* is, to unite intimately with distilled vegetable Oils: For if the most acrid, pure, dry, *alkaline Salt*, is thrown very hot into a distilled Oil, it attracts the Oil greedily, with a considerable hissing Noise, and unites it so with its own Substance, that there is immediately formed a Kind of Soap; and the Oil is more firmly united to the *alkaline Salt*, and the Soap is rendered more perfect, if the Mixture is set in a subterraneous Place; for by this Means both of them

them become semi-volatile, and form a Mass dissolvable in Water, which is endued with excellent medicinal Virtues. This is the *Ens parvum sapientum*, the *Sapo Helmontianus*, the sal-volatile *Tartari* of *Starkey*, and the Corrector of *Matthews*. It was formerly in great Reputation, first in *England*, and afterwards all over *Europe*; for it powerfully resolves almost every Kind of viscid Concretion that is generated from the Humours of the human Body: Hence it incides and attenuates the tenacious Concretions that obstruct the Vessels, and at the same Time it gently stimulates the Vessels themselves; and thus, by acting both upon the Solids and Fluids, it promotes the Secretions by Sweat and Urine, and by these Evacuations carries off the Cause of many chronical Distempers. This Soap also entirely alters the Nature of many Simples, when digested with them; and hence, depriving some of their Virulence, imparts to them Virtues very different from what they naturally possessed. The Chymists, however, as is usual with them, have been too lavish in the Praise of this Medicine, which they have extolled as an universal Remedy. But it must be observed, that this Combination of a fixed *alkaline Salt* and distilled Oil, can never be brought about, if the least Portion of Water adheres either to the Salt, or Oil; and for this Reason, it is necessary, the Salt should be hot when mixed with the Oil. It will even hinder the Success of the Operation, if a small Portion of the *alkaline Salt* stands above the Oil in the Vessel, and thus, by being exposed to the Air, grows ever so little moist.

Fixed *alkaline Salts*, are easily united, also, with the expressed Oils of Vegetables, or Animals, as is daily seen in their Combination, into artificial Soap, by the Assistance of quick Lime, Water, and Fire.

But *alkaline Salts* remarkably attract all Kind of Acids whatever, whether animal, vegetable, or mineral, and that whether dry or moist, pure or diluted. And this Force, with which *Alcalies* thus attract Acids, is incomparably greater than that with which they attract Water: For in this Action, by which they unite these Acids with themselves, they violently expel the Air that resides both in the Salt and Acid, whence arise such Numbers of Air-bubbles, which suddenly appear, and burst. This Union also makes them repel even Water, and when they are thus saturated, they will easily suffer themselves to be dried, or deprived of their Water, which before, when they were separated, they retained most tenaciously. Pure Oil of Vitriol, for Instance, when it is alone, can scarcely by any Art be utterly deprived of its Water; Oil of Tartar not without a great deal of Difficulty: And yet, when you mix them together, the Water is expelled in such a Manner, that a Salt almost dry appears in the Vessel under it. The same is true, also, of other Acids, when they are combined with an *Alkali*. This Power however, by which *Alcalies* attract Acids, is limited to certain Bounds; hence there appears a great Diversity among them, though this, indeed, seems more owing to a Difference in the Acids, than in the *Alcalies*. Upon this Subject, the illustrious *Homburg*, has communicated to the World many useful Observations, some of which are mention'd in the Article of Acids.

When an Affusion of an Acid to an *Alkali*, is performed gradually and cautiously in warm Liquors, and in a large Vessel, if at the same Time the Vessel is shaken after every Infusion of the Acid, the Mixture at last arrives to such a Temperament, that it will admit of no farther Ebul-

lition,

lition, and this is called, the *Point of Saturation*. If Acids are after added, no more Agitation will be excited, than there is upon mixing Water with Water: And the Compound thus produced, is neither *alkaline* nor acid, but *neutral*, formed by the Union of both. Hence Acids have been called, Males, and *Alcalines*, Females, and the Compound of them both Hermaphrodites. The *Alkali*, the Vacuum; the Acid, the Implent: The *Alkali* the Chaos, and the Acid the impregnating Spirit.

The violent Ebullition and Effervescence, that appear upon the Mixture of an *Alkali* and an Acid, whilst the Air and Water are forcibly expelled, may possibly arise, because these Bodies impetuously drive out whatever lies betwixt them, when they rush strongly into mutual Contact; and if so, the Ebullition and Effervescence do not arise from any Disagreement, but from an Association of Principles. Hence the following Queries will naturally arise: First, Whether Acids abound plentifully with Air, whilst *Alcalines* contain none at all? So far is certain, that the strongest *Alkali*, taken out of the Fire, and so probably deprived of all its Air, will, if it is thrown into an acid Liquor, produce a prodigious Effervescence, and a great Quantity of Air will be generated. Hence may we not arrive at the true Reason, why Acids, when they are predominant in animal Bodies, are productive of so much Flatulency? Do not *neutral* Salts, produced from a Combination of *Alcalies* and Acids, lose the greatest Part of their Air; and are they not, for this Reason, found to be very little flatulent in the human Body? Are not acid, or at least aceseht Bodies, the only Substances which are disposed to ferment, because of the latent Air they contain? And is not this latent Air,

the Source of that prodigious Quantity of Air, which is generated by Fermentation? Does Fermentation therefore, naturally tend to the Generation of Acids, whilst an intense Fire produces *Alcalies*?

From what has been said, it appears, that amongst natural Causes, by which Motion is excited in the Universe, we reckon *Alcalies* and Acids, at the Time when these are mixed together, which Motion ceases, as soon as ever this Combination is compleated.

The Motion thus excited, seems of considerable Importance in Vegetation, or rather in preparing the Earth. People concerned in Husbandry are sensible, that frequent ploughing or digging the Earth, mellows it, as they call it, and renders it fertile; or, to speak more philosophically, disunites the Parts of the Earth, which otherwise cohere together, and forth large Glèbes, and reduces them into small Particles, better suited to the subsequent Solution they are to undergo, in Order to the Production of a Plant. Now when the Earth is once furnished with an *alkaline Salt*, and that is immediately united with the earthy Particles, which soon happens, because these Salts, attracting the Water floating in the Atmosphere run into an *Oil per Deliquium*, and sink into the Ground; the same Salts attract, also, the Acid of the Air, till they are saturated, and both together rendered *neutral*. Whilst, therefore, this Neutralization is effecting, an Effervescence is made leisurely; and by Degrees, as the *alkaline Salt* imbibes the Acid. Hence Motion is excited in the Parts of the Soil which were impregnated with the *Alkali*, and by this Motion the Particles of the Earth are separated from each other, more effectually than either by ploughing or digging. This Separation is an excellent Preparation for a future So-

lution, and indeed is one Step towards it; since the Solution of a Body is only the reducing it into Particles fine enough to float in the Menstruum that dissolves it, and small enough to be transparent, and consequently not visible.

There can be no doubt, but that in the Action of these *Alcaline* Menstrua upon Acids, the Water is expelled out of them, as well as the Air; when they thus unite together, for tho' they are perfectly fluid, when they are mixed, yet they harden in the very Act of Combination into little saline Globules, and appear in the Water in the Form of pellucid Crystals; the watery Liquid being driven out, and swimming at the Top. And when the Saturation is complete, the Water may be separated pure, and without any saline Taste, and then the Remainder is easily dried into the Form of a white, farinaceous, opaque Powder, and that too by a gentle Heat, whereas the Parent *Alkali* and Acid, by whose Combination they are produced, either cannot be dried at all, or not without the greatest Difficulty.

It is farther remarkable, with Respect to these compound Salts thus prepared, that it is extremely difficult to separate again the *Alkali* from the Acid, so as to procure either of them pure, by the Assistance of Fire only. Sal-Ammoniac, for Instance, made by a Combination of an *Alcaline* Spirit and Spirit of Sea Salt, may be sublimed by exposing it to a sufficient Degree of Fire; but it will not be thus possible to separate it into the saline Principles of which it was compounded. The same is true with regard to *Tartarus vitriolatus*, *Sal-marinus regeneratus*, *Nitrum Resuscitatum*, *Tartarus regeneratus*, and others. There are, however, some Methods discovered, by which this Resolution of compound Salts, into

their constituent *Alcaline*, and acid saline Particles, may be accomplished, and the Knowledge of those will make us acquainted with some of the most secret Mysteries of Chymistry. In Order, therefore to arrive at the Knowledge of these, it is necessary to examine some farther Properties of Alcalies.

Alcalies, therefore, though they attract all known Acids, at the same time it is remarkable, that they attract some, much more powerfully than others. This Assertion is abundantly confirmed by Experiments. Thus, if upon an *alkali* perfectly saturated with Vinegar, or upon *Tartarus regeneratus*, Spirit of Salt or Nitre, or Sulphur, or Vitriol is poured, then the latent *Alkali* will attract that Acid, and repel from it the Acid of the Vinegar with which it was before saturated; and, hence a Liqueur, nearly of the same Nature with the Spirit of Vinegar, may be afterwards drawn from this Compound with a moderate Heat, there remaining a considerable fixed, regenerated, nitrous Salt, at the Bottom of the Vessel: Again, if Spirit of Nitre is poured upon an *Alkali*, saturated with Spirit of Salt, an Aqua regia will arise in Distillation; and a nitrous Salt will be left at the Bottom; but much changed from its former Nature. On the contrary, if Spirit of Salt is poured upon an *Alkali*, saturated with Spirit of Nitre, the Mixture will in Distillation also yield an Aqua regia, and the Salt that remains will be of a nitrous Nature, and somewhat inflammable; however of a Nature very different, both from Sea Salt, and Nitre. In both these Cases, as there is no considerable Difference betwixt the Acid of Nitre, and that of the Salt, with respect to their Strength, each of these Acids, in some Degree, dislodges, and expels the other, by which Means they rise mixed together

her, and both of them also remain united with the Alkali in the Residuum.

Pour Oil of Vitriol upon an *Alkali*, saturated with Spirit of Nitre; a pure Spirit of Nitre is immediately expelled, and the Acid of the Vitriol unites with the alkaline Part of the Nitre, and forms a Salt at the Bottom, somewhat of the Nature of *Tartarus vitriolatus*, though different from it in some of its Properties; it has, however, scarcely any Thing in common with Nitre. And, lastly, if Oil of Vitriol is poured upon factitious, or natural Sea-Salt, a very volatile Acid, fuming Spirit of Sea-Salt, will instantly arise, endowed with almost all the known Virtues of Spirit of Salt, except that it fumes more, is more volatile, and its Vapour is noxious and suffocating, till it is corrected by repeated Depurations. All these Experiments, therefore, certainly prove that those Acids which are naturally diluted with a less Quantity of Water, have a greater Power of uniting themselves with *Alcalies*, than those, which are naturally diluted with a greater. And this Rule, so far as has yet appeared by Experiments, may be laid down as general, that the stronger Acid always expels from the *Alkali* that which is weaker, and which is the least powerfully attracted by the *Alkali*. And then the stronger Acid always unites with that *Alkali* from which the weaker was expelled, and takes Possession of the Place in which that resided.

Again, the Salt thus generated, losing the Disposition it had acquired from the first and weaker Acid, which is now removed, puts on very nearly the Nature of that Salt, from which the last and stronger Acid, which is now united with the alkaline Part, was drawn. It must however be confessed, that there is always some remarkable Difference betwixt the Salts thus generated, and

the native Salts from which those stronger Acids were procured. Thus, for Instance, the *Sal Mirabilis Glauberi* which is prepared by a Distillation of Sea-Salt, with the best Oil of Vitriol, is of a very different Nature from that *Tartarus vitriolatus*, which is obtained by a Saturation of Oil of Tartar with Oil of Vitriol. This is also true, with respect to other compound Salts. Thus the Salt which is procured by distilling *Glauber's* Spirit of Nitre, is entirely Different from the *Sal Mirabilis* of the same Author, though both these are supposed to be produced from the same Acid, and the same *Alkali*. This Rule therefore, which has been laid down by the most eminent Chymists, that *Acids always convert Alcalies into their Nature in such a Manner, that from these Compounds, may be constantly regenerated those Salts, which before yielded those Acids*, is too general, and must be understood with some Restriction.

It is farther remarkable, that when these stronger Acids thus poured upon compound Salts, expel thence the weaker Acids which were united with them before, and join with the remaining *Alcalies*, this new Combination is effected without any considerable Effervescence or Conflict: For the first and weaker Acid quits the *Alkali*, and the last and stronger takes its Place, without any great Ebullition, notwithstanding there arises such a prodigious Emotion, when a pure *Alkali* is mixed with a pure Acid. Nor does it appear that any Air is generated by this Union, though in the other Case it was expelled in so large a Quantity. It is probable, therefore, that the Effervescence which was excited in the first Saturation of the *Alkali*, had expelled all the Air, so that now the new Acid does nothing more than enter into the saturated *Alkali* thus deprived of its Air, and remains there, without either expelling or attracting any Air; and it seems

seems a farther Confirmation of this, that if the Acid which is expelled by a stronger Acid, is mixed with another *Alkali*, it will with that raise a violent Effervescence, so that a great Heat, Noise, and Generation of Air will be produced, whilst in the compound Salt, there was very little of any such Appearances.

With Respect to the Effects of fixed Alkaline Salts, considered as Medicines, it must be remarked, that they soon destroy all the Acid in the Body, for there it meets but with a small Quantity, and that too, a mild vegetable Acid only residing in the *Primæ Viæ*, that is in the Stomach and Intestines.

If they meet with an Acid there, they Cause an Effervescence, generate Wind, and cause Eructations, stimulate by their Activity, and are converted, together with the Acid, into a neutral Salt, which then becomes harmless, penetrating, aperient, diaphoretic, diuretic, and antiseptic, and productive of new Effects by Virtue of their Neutralization, which are sometimes attributed to the *Alcaline Salts*, because subsequent to their Exhibition.

By Means of this Effervescence they stimulate the Nerves, move the Spirits, and incline both to Motions different from what they had before; hence they often cure the Spasms of hypochondriacal Men, and hysterical Women, and the Distempers depending on them, an Instance of which we see in the celebrated Anti-Emetic of *Riverius*, consisting of an *Alkaline Salt* mixed with the Juice of Lemons, which if drank in the Act of Effervescence, cures the Cholera Morbus, and stops obstinate Vomings, which resist all other Methods.

They attenuate and resolve whatever is coagulated by an Acid, and hence when Milk is curdled in the Stomach

they have very good Effects, if prudently administered; they are also capable of resolving other tenacious Concretions.

They attenuate glutinous, oily, and fat Concretions, and render them more easily mixable with Water, and hence become Detergents. Fullers, Laundresses, and Diers are sensible of this Property in a Lye of these Salts, and therefore they use them to remove viscid greasy Concretions from Cloths; if moderately used, therefore, they free the Chylopoietic Organs from all glutinous Impurities.

They resolve Coagulations of the Bile, Lymph, Blood, and Serum, when admitted into the internal Parts of the Body, and there agitated by the vital Powers.

By their acrid Stimulus they put in Motion Bodies that were before unactive, and hence they provoke Urine, Sweat, and Perspiration; and for this Reason are numbred amongst Diuretics, Diaphoretics, and Sudorifics; the Intestines also they stimulate to a Discharge of their Contents.

In Diseases, therefore, attended with unactive mucous Viscidities; where an Acidity prevails in the Stomach and Intestines from acescent Aliment, where there is Load of acescent austere Crudities manifest by the Coagulations it produces, where a watery Serum, or fat tenacious Concretions abound, or where Distempers have been generated by these Causes, as the Dropsy, Jaundice, Leucophlegmatia, Gout, Rheumatism, and Scurvy, in these Cases, this Salt is of great Use, if prudently given, that is, well diluted, in small Doses, and those are administered at a proper Time, and properly repeated. That Species of Gout which is caused by an abundant Acid, scarcely admits of a more successful Method of Cure, than that which may be performed by a continued

tinued Use of these Salts, taken in small Doses. But it does not follow from their Effects in this Case that they are to be extolled as universal Remedies for the Gout; for they will do a great Deal of Prejudice to a gouty Patient, whose Bile is exalted into an acrid Alcalescence, and whose Humours tend spontaneously to an alkaline Putrefaction.

These Salts are also of considerable Use to the Surgeons; for as Caustics they are employed to raise Escars, in order to make Issues; and by a temperate Lixivum of these, fordid, putrid Ulcers are successfully mundified; Parts that are corrupted by a Gangrene, if scarified almost to the Quick, and then fomented with a Lixivium of these Salts, contract into a Crust, and then admit of a Separation from the living Part, and by these Means the Mortification is prevented from spreading farther, and a Cure is happily effected. They extirpate Warts, also, and eat away small Cancers with Safety, and if sufficiently diluted, they will effectually take away Discolorations or Spots of the Skin.

It is, however, necessary to remark, that the Use of these Salts is highly pernicious in every Disease, where the native animal Salts begin to degenerate into an acrid, alcalescent, putrid, volatile Nature; or where the natural Oils of our Bodies are disposed to turn acrid, fetid, putrid, rancid and volatile, which is manifested by a disagreeable Smell, peculiar to this Kind of Putrefaction, and a Redness of the Urine. But these Salts are particularly destructive, when the Bile is thus degenerated into an acrid *Alcaline* Nature, and when the Humours of the Patient are too much dissolved, fluid, and putrid; hence in the Plague they are almost an immediate Poison; and this pernicious Quality is even communicated to the Soap in which they are an Ingredient. Hence, therefore, in Inflammations, Suppurations, Gangrenes, a Sphacelus, continued, putrid Fevers, and Diseases arising from too great a Velocity of the Blood, the internal Use of these Salts must be absolutely forbidden.

CHAPTER VII.

OF MENSTRUUMS.

THE old Chymists in some of their Solutions, used a moderate Fire, for a philosophical Month, that is forty Days; and hence their Solvents were called Menstrual Solvents, and at last *Menstrua*, and hence arose this Term now applied to all Dissolvents.

It is customary to divide Menstruums into Solid and Fluid. Thus Metals, and Semi-metals, dry Salts, hard fossil sulphureous Bodies, and

what the Refiners call Cements, which consist of Salts, Sulphurs, and powdered Brick, are accounted solid Menstruums.

In order to constitute a Menstruum, properly so called, it is necessary that the Solvent together with the Solvent, should be so united, as to become one homogeneous Fluid. Hence it appears that solid Menstruums cannot act as such, till they are reduced by Fusion to Fluidity.

The

The first Class of fluid Menstruums, consists of Water, and aqueous Liquors. But Water, in the Form of Ice, is a Solid, which dissolves into a Liquor, upon being mixed with dry, or fluid Salts, of the fixed and volatile alkaline Kind, with fixed, or volatile acid Salts, compound Salts, and the fermented Spirits of Vegetables, and this even, in the highest Degree of Cold. As a fluid Menstruum, it begins to act in the Degree next below that of freezing. In many Solutions, where Water is the Menstruum, the dissolving Power increases, and diminishes, with the Degrees of Heat. Thus Water, thirty-three Degrees hot, dissolves a certain Proportion of Sea-Salt, which prevents the Water, from turning to Ice, by the same Degree of Cold, which would freeze Water, without any Salt dissolved in it; and this probably happens, by the Interposition of the Salt, by which, the Surfaces of the Particles of the Water, are hindered from coming into mutual Contact. But when the Cold is increased, far beyond the Degree, which freezes pure Water, then the Salt Water begins to contract, and the Salt to be collected at the Bottom, of the Vessel, in little Crystals. And as the Cold gradually increases, this Water gradually deposits more Salt, till at last, being nearly deprived of all its Salt, it is changed into Ice, and when this is thawed, all the deposited Salt, will be again taken up by the Water. On the other Hand, if Water thirty-three Degrees hot, has dissolved as much Salt, as it could in that Degree, and be afterwards gradually heated farther, to the Degree of boiling, and upon the Increase of every Degree, a little more Salt be added, this additional Salt, will be dissolved every Time, till the Liquor boils, after which it will dissolve no more, tho' boiled never so long.

Hence 'tis obvious, First, That the Parts of the Salt, and Water, are not here changed, but so conjoined, that the Water now touches the Parts of the Salts, as the Particles of the Salt, or Water, before touched each other, so that this Species of Solution, is no more than a simple Permixture. Secondly, that the Increase of Heat, increases the Power of Permixture, so long as the Water, can receive any higher Degree of Heat. Thirdly, that aqueous Menstruums, saturated with Salt, grow turbid in the Cold, and deposit saline Crystals; but when heated, become transparent again, and dissolve the Salt they had deposited. Fourthly, That boiling Water, saturated with Salt, is heavier than common Water; whence Brine in a boiling State, is found hotter than pure boiling Water, and requires a greater Heat to boil it. Fifthly, that the solvent Power of Water, does not depend upon the Water alone, but requires the Assistance of Fire, to render the Solution perfect.

These Discoveries, applied to the animal Juices, especially those of the human Body, are of the last Importance; for Water is the principal, and most copious of all the Fluids, contained in an healthy human Body. So that in this the other Principles of the animal Fluids, are dissolved, mixed, combined, and preserved fluid. As Water, then, is so liable to Changes, by Heat and Cold, the human Juices, must of Consequence, be proportionably altered. Thus how greatly is Blood drawn from the Veins, changed by Cold, from what it was in the Body; and the Urine of an healthy Person, soon deposits a Sediment, which is again taken up, by warming the containing Vessels. So that it is highly probable, that the solvent Power of Water, almost always increases in Pro-

Proportion to the Heat, applied in boiling it, tho' at the same Time, there are various Experiments which evince, that the solvent Power of Water upon some Bodies, decreases as the Degrees of Heat increase. Thus Balls made of Flower, and Water, are resolved in the cold or tepid, but hardened in boiling Water; the Serum of the Blood, and the Whites of Eggs, also, coagulate in boiling Water. But certain Bodies, are always dissolved by Water, in all its Degrees of Heat. Of this Kind are, First, all the known neutral Salts. Secondly, all the known pure, volatile, alkaline Salts, obtained from Animals or Vegetables, by Putrefaction or Distillation. Thirdly, all fixed alkaline Salts, obtained from Vegetables by Calcination. Fourthly, all Kinds of Acids, naturally found in Vegetables, and in all the acid Salts; all Kinds of native, fossil, acid Salts, with all the vegetable acid Juices, which afford a Spirit or Vinegar, by Fermentation; the Acids obtained from Woods by Distillation, distilled Vinegar, Oil of Sulphur by the Bell, Oil of Vitriol, Spirit of Alum, Spirit of Nitre, and Spirit of Sea-Salt. Fifthly, artificial compound Salts, by the Combination of Acids, and Alkalies, so as to render them neutral, all which easily dissolve in Water; but Tartar of Vitriol, with the greatest Difficulty. Sixthly, Salts of the Borax kind, which are also with Difficulty dissolved by Water. Seventhly, the native Salts of Plants, which are artificially procured, and which easily dissolve, and run spontaneously in the Air. Eighthly, the vegetable Salts called Tartar, which require twenty times their own Quantity of Water, to dissolve them by boiling.

Water, as a Menstruum, dissolves all those Bodies called *Saline*, and which contain some of the above-

mentioned Salts, as a principal Part in their Composition. Such are, First, The native Soaps of Vegetables, as all the ripe Juices of Summer Fruits, being a Mixture of Water, Oil, Spirit, and Salt. Secondly, Certain concreted Juices perfected in particular Parts of Plants: As the Pulp of *Cassia*, Manna, Sugar, and Gums; which are Soaps containing a copious Oil mixed with Salt. Thirdly, The more fluid Juices of Vegetables circulating through the Vessels, and whole Structure of the Plant. Fourthly, All known animal Juices except Fat; though none more easily than Bile. Fifthly, All the Soaps made of expressed vegetable Oils, and fixed vegetable *Alkalies*, mix'd by Means of boiling Water with the fiery Part of quick Lime, and by Boiling reduc'd to an hard Mass. Sixthly, Vitriols, especially of the acid Kind, are dissolv'd in Water, whilst they retain their true transparent Form; but when the Water is exhal'd by a gentle Heat, so as to render the Crystals opaque, the metallic Parts are thereby less dispos'd to dissolve in Water; and if highly dry'd, will not dissolve at all. Hence Water dissolves Metals, only on Account of the Acid adhering to the Surfaces of their Particles, and therefore quits the Metals so dissolv'd, as soon as the Acid is remov'd. Thus Metals dissolv'd in Acids, and largely diluted with Water, become potable, so as to be receiv'd into the Body, mix with the Fluids, act upon the Solids, and produce considerable Effects; though this Power lasts no longer than they remain dissolv'd; and their Solution depending principally on the Acid, that being remov'd, the Metal is no longer potable, but turns to a Calx. What is said of the Action of an Acid with respect to Water, also holds true, of those Metals which are dissolv'd by *alkaline Salts*: This however

however, does not hold true of all Metals; for tho' Butter of Antimony be highly acid, yet instead of being diluted with Water, it immediately upon the Effusion thereof, lets fall the Antimony into a white Calx, which being fus'd by a strong Fire, affords a fine Regulus of Antimony, incapable of being dissolv'd in Water.

If pure earthy Bodies be first dissolv'd in Acids, they may afterwards be perfectly diluted with Water, so as to escape the Cognizance of the Senses, and leave the Whole of the Liquor limpid, so that 'tis unsafe to infer that a Liquor is free from Earth, because it appears pellucid.

Alcalies intimately united with Earth, as in Glafs, cannot be afterwards diluted with Water, so great is the Difference between the Solution of Earth with one Kind of Salt and another. Sulphurs are not of themselves dissolv'd in Water, but when intimately mixed with *Alcalies*, they readily unite with it; whence we may easily understand the medicinal Virtues of sulphureous medicinal Waters. Volatile-alkaline Salts, also, dissolve Sulphurs, and render them miscible with Water, so that Water by the Assistance of *Alcalies*, becomes an excellent Solvent for Sulphurs.

Tho' Bodies of a glutinous, viscid, or hard Substance, remain untouch'd by Water, yet these may be render'd perfectly soluble in it, by being intimately united with fix'd or volatile *Alcalies*: Thus Soap, Honey, Sugar, and the Yolks of Eggs, being mix'd with these tenacious Bodies, render them commodiously dissolvable in Water, which by this Means generally acquires a detergent Quality. Oils, Balsams, Gums, and the like, are also to be mix'd with Water by this Treatment. Hail collected in the Summer-time after Thunder, consequent upon a Series

of a hot Weather, when kept in clean Vessels, has a different Effect from all other Water, perhaps on Account of its being purer, carried higher into the Atmosphere, and frozen before it fell to the Ground. Next to this in Purity, is Snow-water, collected in a cold Winter in a still Air, and in high sandy desert Places. Dew being a Mixture of aqueous, spirituous, saline, and unctuous Vapours, and of all Sorts of dry Exhalations, differs greatly from all other aqueous Menstruums, so that its Effects can hardly be determin'd, or brought under one Class: Hence many have imagined, that the Matter of the universal Salt was contain'd in it, and that a saline Substance, which they call the congel'd Spirit of the Universe, might be extracted from it. It is to be observ'd, that the Water floating in the Air, may often act as a Menstruum, and the Action be falsely ascrib'd to the Influence of the Air.

Oil considered as a Menstruum, is a Juice either fluid, or capable of being rendered so by a small Degree of Heat. It is of an unctuous Nature, inflammable, and immiscible with Water. *Alcohol* is excluded from the Class of Oils, by its being easily mix'd with Water, whilst in other Properties, it has a perfect Resemblance to them.

The dissolving Power of Oils is not exerted, unless they are in a fluid Form; and as some of them freeze sooner than Water, their dissolving Power is less durable with respect to Cold, than that of Water; but those which remain fluid in all the Degrees of natural Cold, constantly retain their dissolving Power; whence it appears difficult to fix a common Point of Heat, at which the dissolving Power of Oils begins, though it may be nearly estimated in any one Species of Oil, after it has been once accurately observed. But it is surprising,

surprising, that tho' Linseed Oil remains fluid in the keenest Frost, yet it is then no hotter than Ice, or any other congealed Oil.

When Oil is gradually heated, it does not boil, like Water, with two hundred and twelve Degrees of Heat, but grows constantly hotter without boiling, till the Heat rises to six hundred Degrees; whence we see why boiling Oil is so much hotter, and more scalding than boiling Water: But the most subtle Oils boil the soonest, whereas others bear a great deal more Fire before they boil. Hence 'tis very difficult to determine the dissolving Power of Oils; because in Linseed Oil, for Instance, this Power begins with the greatest Degree of natural Cold; whence it increases to that Degree of Heat, which is capable of melting Lead.

As Oil receives almost thrice as much Fire as Water, we may hence, easily understand, why the dissolving Power of Oils, which in Menstruums depends upon Fire, must be greater than that of Water; for 'tis obvious from many Experiments, that the Power of Heat in Linseed Oil is, to that of Water, as ten to three; and as many Oils inspissated by Boiling, may thus receive much more Fire, so the Scale of the Power of Heat, may be still farther extended in such Oils.

Some Metals may be intimately dissolv'd in particular Oils, by Boiling; and by this Means various useful Discoveries have been made, both for mechanical and medicinal Purposes. But in order accurately to explain the dissolving Power of Oils, 'tis to be considered, that every expressed crude Vegetable Oil, constantly contains Water, as is obvious by boiling expressed Oil of Almonds in chymical Glasses, for by this Means, an aqueous Vapour is raised, and condensing in the Neck

of the Vessel, forms visible Drops, which falling back upon the boiling Oil, occasion great Commotion, and crackling, which may in some Degree affect the Manner of Solution. Hence after this Water is discharged by boiling, the Property of Oil, as a Menstruum, is changed.

Besides this Water, Oils contain a subtle latent Salt, supposed to be very penetrating, which is generally acid, and volatile, as in some of them is obvious from the Smell. These Salts appear in the Form of acid Spirits, collecting themselves like Water, and separating from the Oil, so as not to be again easily mixed with it; tho' 'tis not easy, perfectly to free the Oil from its acid Spirit, which rises in the whole Distillation, but in the greatest Quantity at first.

We ought, therefore, carefully to examine, whether the dissolving Power of Oils, does not depend on the Water and Acid they contain, otherwise we may fall into egregious Errors; for in Painting, Colours which have been dissolved, in boil'd Oil, unite and sink in better, dry quicker, and remain more beautiful, than when mixed up with crude Oil. Thus also the particular Power, which the softest Oils are supposed to have, in dissolving Metals in a gentle Heat, seems principally to proceed from the latent Acid, and not from the oleous Part; since when Olive Oil is mixed with very fine Filings of Iron, Copper, or Lead, and long digested together, a Part of the Metal is taken up by the Oil, so as to give it a new Colour, and other Properties. Hence the Power of Oil, simply considered, has been carried too far, as a Solvent; for this Power does not remain in them, after they have been boiled, and are deprived of their latent Acid, which by Experiments, *Hoffman*, has shewn

shewn to be contained in distilled Oils.

Oils obtained by Distillation, with or without Water, by the Retort, constantly leave Earth behind them, upon being redistilled to Dryness in close Vessels, and gradually become more subtile, less adhesive, more fluid, and transparent, and when redistilled fourteen Times or more, they each time become different Oils, and different Menstruums, so as at last to become penetrating, anodyne Medicines, highly beneficial in many obstinate Disorders. Whence *Hellmont* the Elder imagined that the Oil of human Blood, several Times distilled with Spirit of Salt, till no Feces were left behind, would prove a diaphoretic Medicine, capable of dissolving, like a *Menstruum*, all preternatural Obstructions, and Coagulations in the human Body. *Hoffman*, also, assures us, that he has prepared Oils in this Manner, and greatly extols their medicinal Virtues.

All Oils have a certain subtile, volatile Substance, adhering to them, and separable from them, which is called their *presiding Spirit*; which is a movable, odorous, high tasted Substance, and the genuine Cause of great Effects; this innate Spirit, when confined in Oils, communicates to them a singular efficacious Virtue, to be found no where else. But it is from many Oils spontaneously exhaled, by a gentle Heat, mixes with the Air, and when entirely evaporated, leaves them insipid, and inactive, so as to be hardly distinguishable from each other. So that the dissolving Power of Oils seems principally to depend upon this Circumstance, that they are disposed to receive into themselves, a great Deal of Fire, which they apply to other Bodies.

Moist Oils are capable of being mixed and incorporated; First, with

other Oils, tho' some of them not easily, as in the Distillation of Turpentine and Amber, where the Oils raised by different Degrees of Fire, are different in Weight, Consistence, Colour, and Situation, so as not readily to unite with each other. Secondly, True resinous Bodies melt and dissolve in Oils. Thirdly, So do many of those Gums, which have a Mixture of Rosin. Fourthly, So, likewise, do condens'd Oils or Balsams. Fifthly, So do Sulphurs, natural and artificial, liquid or solid, tho' conceal'd in other Bodies. Thus Antimony, finely powder'd, or sublim'd into Flowers, when boil'd with Oil, soon yields a red Balsam of Antimony, dissolv'd by the Oil, which leaves the metallic Parts untouch'd; and the same holds true of the other Semi-metals abounding with Sulphur.

As for spirituous Menstruums, properly so call'd, Chymists assert, that *Alcohol* cannot be united with a pure fix'd *Alkali*, because this Effect may be prevented by the least aqueous Moisture, either in the Salt, or in the *Alcohol*. But if pure *Alcohol* is applied to perfectly dry Salt of Tartar, a rich Tincture is immediately extracted, and a true Combination made. Hence we ought to be highly inquisitive about the Nature of this Liquor, which is the most considerable of spirituous Menstruums.

Perfectly pure *Alcohol* dissolves, First, Water, and all aqueous Liquors. Secondly, Consequently Wines of all Kinds. Thirdly, it dissolves all spirituous fermenting Acids, such as Vinegars. Fourthly, All pure Oils. Fifthly, All true vegetable Resins. Sixthly, Most of the gummy Refins. Seventhly, Pure volatile alkaline Salts. Eighthly, Perfectly dry and fixed Alkaline Salts. Ninthly, Most of the Soaps. Tenthly, Sulphurs, first opened and dissolv'd by an Alkali. But it does not touch compound or native Salts,

as Sal-ammoniac, Sea-salt, and Nitre; nor pure Earth, pure Sulphur, Mercury, Metals, Semi-Metals, nor Stones, whether of the common, or of a more precious Kind.

As for alkaline and acid spirituous Menstruums, Chymists, under oleous and spirituous Menstruums, have ranged these two Kinds, which might rather be term'd saline or compound. This happens, because the Menstruums usually appear under an unctuous Form, and are, generally, not only volatile, but, also, liquid and subtile. Whence some Acids, and Alkalies, have been called Spirits, on account of this subtile, volatile, and unctuous Appearance, tho' they greatly differ from each other, not only in Kind, as to Acid and Alkali, but also Acid from Acid, and Alkaline from Alkaline Spirit. We must, therefore, necessarily divide the saline spirituous Menstruums into those of the acid and alkaline Kinds; whilst we divide the alkaline Spirits into simple and compound. The simplest of these consist of Water, and an extremely subtile, volatile, alkaline Salt, both together appearing in the Form of a thin, pellucid, and somewhat unctuous Liquor, as the pure alkaline Spirit of Sal-ammoniac. And to this Class belong the numerous alkaline Salts, obtain'd both from Animals and Vegetables, after they are deprived of the Oil which adheres to them. The more compound Kind generally consist of Water, the volatile Salt now mentioned, and a fetid Oil, into which three Parts they may be separated, and are therefore a Kind of volatile alkaline Soap, diluted with a Portion of Water just sufficient to dissolve it. The Acid and commonly volatile Liquors, by the Chymists call'd Spirits, when examined, prove to be acid Salts, dissolved in pure Water; so that we may properly call them, saline Menstruums.

As for the simple, saline Menstruums, 'tis certain that various Salts have great Energy in the Dissolution of Bodies. But as the ultimate Particles of Salt are so minute, that they cannot be distinctly viewed, by the Assistance of the best Glasses, and so volatile, that they can hardly be confined in Vessels, so they must be reduced to Clusters, by Means of some Cement, the most considerable Parts of which are Water and Earth, before we can arrive at any great Certainty with Respect to their chymical Action.

We must also consider the principal Difference of Salts, arising from the different saline Principles of which they are composed, and tho' these Principles are known separately, yet doubtless they have a certain peculiar Virtue respectively. A second Difference arises from the other Principle, which, uniting with the Saline, constitutes the Salt. We therefore divide all Kinds of Salts into such as differ, either with Respect, to their saline Principle, their connecting Principle, or both. With Respect to the first Division, we distinguish Salts and saline Menstruums into the following Classes. First, fixed Alkalies. Secondly, volatile Alkalies. Thirdly, native vegetable Acids. Fourthly, fermenting vegetable Acids. Fifthly, fermented vegetable Acids. Sixthly, vegetable Acids obtained upon burning. Seventhly, vegetable Acids procured by Distillation. Eighthly, native fossil Salts. Ninthly, fossil Salts obtained by Burning. Tenthly, Fossil Acids procured by Distillation. Eleventhly, neutral Salts, as Borax, Nitre, fossil Salt, Sea-Salt, Sal-Gemmæ and Sal-Ammoniac. Twelfthly, other Salts compounded of these simple ones. Each of which should be examined in order, to find out their peculiar Properties whereby we may come to a true Knowledge of them

fo far as regards the Diffolution of Bodies.

As for fixed alkaline Menstruums, 'tis certain that not only these, but also volatile Alkalies have a solvent Power, First, upon animal, vegetable and mineral Substances so far as those contain Oils, Balsams, Gums, Resins, or gummy Resins, or consist of unctuous Matter; as also upon Sulphurs, whether pure, compounded, or joined, with other Materials, all which these Alkalies excellently open, attenuate, resolve, and dispose to mix intimately with Water, Alcohol, and Oils. Secondly, These Alkalies also act as a Solvent, upon those Bodies whose component Parts are held together by an acid Cement, which being thus attracted by the Alkali, the component Parts thus separate or fall asunder. Thirdly, after certain Bodies have been dissolved by an acid Menstruum, pure Alkalies, often exert a new Force, so as to dissolve such Bodies better than if applied to them before they were thus dissolved by the Acid. Hence, Alchymists, in order to obtain, the Mercuries of Metals, direct the Metals, to be first calcined by Acids, and afterwards treated with Alkalies.

But there is a Difference, in the Manner, in which fixed, and volatile Alkalies act; for volatile Alkalies act and are agitated spontaneously, or by a small Degree of Heat, whereas those of the fixed Kind, require a much stronger Assistance, from the Fire, in order to their acting; volatile Alkalies, fly off the Moment they are heated, and therefore do not exert, their solvent Power, when applied to hot Bodies, whereas fixed Alkalies, sooner enter the Bodies they dissolve when assisted by Heat, and remain constantly applied to every fixed Subject they act upon. But when volatile Alkalies, are purposely kept close

to a Substance to be dissolved, a moderate Heat increases, and quickens their dissolving Power, as we observe, for Instance, upon applying the volatile Salt of Urine to the warm Skin, and covering the Salt, with an adhesive Plaster; for thus there soon arises Heat, Pain, and Inflammation, followed by an Ulcer, and a black Eschar.

As to acid Menstruums, the Acids, can hardly be obtained pure, but blended with other Bodies, so that 'tis exceedingly difficult, to treat of their proper Action; yet we know the Virtues of some of them, by their Effects upon certain Bodies; since the fresh Juices of Oranges, Citrons, and Lemons, dissolve Lead, Tin, Copper, and Iron, and pretty strongly calcines them, as well as fossil Acids.

There are in Vegetables, certain Acids, of an oleous and balsamic Quality; for if the Woods of Guaiacum, Juniper, Oak, and a great many others, are reduced to dry Shavings, and carefully distilled in a Retort, they yield a limpid, redish Liquor, which is very acid, especially, if depurated by Filtration, and permitted to stand quiet; and the solvent Power of this Menstruum is perfectly singular, since, in the human Body, it produces wonderful Effects, by attenuating, preserving, stimulating, and resisting Putrefaction, and carrying off the peccant Matter, by Sweat and Urine. If in these Menstruums, therefore, the medicated Virtues of Plants are dissolved, the Solutions become exceedingly efficacious, as they act by their highly subtil, penetrating Acid, and exalt the Qualities of the Bodies dissolved in them. All these vegetable Acids, are capable of dissolving many animal, vegetable, fossil, and metalline Substances; for by Digestion and Coction, they dissolve Horns, Hoofs, Bones, and the Flesh of
 Animals,

Animals. The Shells of Fishes and other Animals, they corrode into a pellucid Liquor, but do not dissolve Mercury, Silver, nor Gold.

Some fossil Acids, readily dissolve Iron, Copper, somewhat slower, Silver, with a good Deal of Difficulty, and Mercury, not at all, except placed in an intense Degree of Heat.

Neutral Salts are also found, in many Cases to be Menstruums; for Sal-ammoniac, which easily dissolves in Water, and runs *per Deliquium* in a moist Air, thus makes an extremely pungent, penetrating Liquor, capable of dissolving, gross, gelatinous, pituitous, and gummy Concretions, in the Bodies of Animals, being not only admirably, attenuating, resolving, and incising, but also diuretic, sudorific, stimulating to the salival Glands, and at the same Time, greatly preventive of Putrefaction. This Solution, of Sal-ammoniac boiled, or digested with gummy, or resinous Vegetables, resolves them intimately, and disposes them to be dissolved, in aqueous or spiritous Menstruums. Filings of Iron, boiled in it, are excellently dissolved, and converted into an admirable, aperient, and invigorating Medicine. When digested with Filings of Copper, it produces a beautiful blew Liquor, a few Drops of which, taken upon an empty Stomach, often prove good against Worms, and epileptic Fits.

The pure dry Salt, sublim'd into Flowers, well ground, mixed with Fossils, and sublimed together in close Vessels, produces very extraordinary Effects, as a Menstruum, for which Reason the Alchymists have called it the *White Eagle* or the *Philosophical Pestle*. If sulphureous Bodies, Metals, or Semi-metals, are thus treated, they are attenuated, opened, volatilized, and perfectly changed, whence most ex-

cellent Medicines are prepared, in this Manner, and hardly so well in any other.

Tho' Sea Salt, Sal-gemmae, and Fountain-Salt, differ in their Origins, yet they easily dissolve in Water, and run *per Deliquium* in a moist Air, so as to make a Brine, or an excellent Menstruum, producing nearly the same Effects, as the Brine of Sal-ammoniac.

Common Nitre, being produced from animal, alkaline, and calcareous Substances, is easily turned to a fixed Alkali, and a volatile Acid. It also appears of a particular Nature, when applied to Bodies as a Menstruum, in which Case its Operations, are sometimes so intricate, as to be hardly explicable. When exposed to the Fire, in a pure and dry State, it flows with certain Bodies like Water, and thence surprisingly promotes their melting, tho' otherwise of difficult Fusion; and thus attenuates, divides, and intermixes their Parts, even whilst it acts upon them, in no other Respect, for which Reason, it is used as a Flux for Metals.

If the Matter, thus mixed with the Nitre, contains any Thing oleous, unctuous, or sulphureous, this suddenly deflagrates, with the Nitre in the Fire, raises a violent Flame, and greatly increases the Heat; whence the Application of the Nitre being stronger, it greatly divides, fuses, changes, and separates the Bodies, in a different Manner, from what is otherwise known; the Nitre, at the same Time, losing its own Nature, and becoming a Kind of *Sal Polychrestum*, which has a dissolving Power, different from that of Nitre. Whence the Action of Nitre, upon Bodies, is of one Sort, before it deflagrates them, of another during the Deflagration, and of a third, after the Deflagration is over.

When

When Nitre is melted, along with a vegetable Coal, its Parts are so strongly agitated, as to produce, a similar Agitation in the Bodies, to be dissolved; at the same Time emitting particular active Fumes, capable of dissolving and penetrating many Bodies in the Fire. But when the Nitre is thus changed, to a fixed Alkali, it does not flow, unless the Fire be violent, and then according to its penetrating, and particular Nature, it begins to act as a fixed alkaline Menstruum, and thus acquires, and exerts a new dissolving Power.

If the Bodies to be dissolved, by Fusion with Nitre, contain Earth, Stone, Alum, Vitriol, Bole, or any other similar Substance, the Nitre is immediately changed, into a strong Acid, volatile Salt, or Spirit of Nitre, which being agitated by a violent Fire, penetrates, dissolves, and changes the Subject, acting with one of its Parts like *Aqua Fortis*, while the other Part, remaining at the Bottom, acts, by a very different dissolving Power.

From what has been said, we may easily conceive, that various Combinations of Salts, may produce many new Kinds of Saline Menstruums, of singular, and uncommon dissolving Powers. So that 'tis easy to confute the Error of the modern Chymists, who make *Alcalies* and *Acids*, the Principles of all Things, and assert that their Virtues are destroyed, by mixing them together. On the contrary, 'tis certain, that the pure *Alkali* of Tartar, mixed with the volatile Acid of Vinegar, forms a neutral Salt of a much greater Virtue, than the separate Acid, or Alkali. When a pure volatile Alkali, is exactly saturated, with strong Spirit of Vinegar, we have a limpid, slightly saline, volatile and compound Liquor, able to pass thro' almost all Bodies, so as to dissolve them, without any considera-

ble, visible Conflict. Whence, some have greatly extolled this Liquor, in curing Disorders of the Eyes, and Ears, arising from Concretions. What has likewise been accounted, a great and successful Secret, for resolving cold and glandulous Swellings, is to foment them, with a Mixture of putrified Urine, and Vinegar, the Part being first rub'd, and the Liquor applied warm.

When pure volatile, alkaline Salts are mixed with native, fossil Acids, a particular Kind of ammoniacal Salts, are produced, which may be called Semi-volatile, vitriolated Tartars, and highly deserve, to be regarded by Chymists, on Account of their remarkable, dissolving Property, and by Physicians, on Account of their aperient, attenuating, resolving, and stimulating Virtues.

Some Menstruums, arise from the Combination of fixed Alcalies, with fossil Acids, obtained by Fire. Thus when a pure fixed Alkali, is perfectly saturated, with the Acid of Sea-Salt, Sea-Salt seems to be regenerated. When saturated, with the Acid of Nitre, it reproduces Nitre, and with the Acid of Oil of Sulphur, or Vitriol, it constantly produces vitriolated Tartar. Hence it appears how many, and what surprising Actions of Menstruums, arise from the mixing of certain Bodies together, and applying them to the Fire, and without an exact Knowledge, of all these Particulars, we can never have an adequate Comprehension of the chymical History of *Menstruums*.

Menstruums, are also obtained, by uniting pure simple Salts, with other Salts. Thus, if a pure Alkali be added, to the Brine of Sea-Salt, an earthy Matter, is precipitated, and the Salt obtained by Crystallization, from the clear Liquor, will be a purer Sea-Salt. The same fixed Alkali, added to the Brine of Nitre, changes the Liquor thick, and

tre, changes the Liquor thick, and milky, and precipitates an earthy Matter, whereby the Nitre obtained from this Solution, becomes extremely pure. Numberless surprizing Instances of this Kind, in the History of Menstruums, may be understood, from these Principles; only 'tis to be observed, that in whatever manner Salts are combined with Salts, new saline Productions and Menstruums will arise; whence the Art of Chymistry may be perpetually improved, and new Phenomena produced, which not only afford Pleasure to the Mind, but also increase our Knowledge of the natural Properties of Bodies, and often lead to great and unexpected Discoveries, for the various Purposes of Life.

New Menstruums, of particular Virtues, may be infinitely made, by variously combining different Menstruums together, by bringing each Menstruum to its greatest Purity, and reducing some of them, to their most minute Particles; for upon these three Particulars, depend the Skill of the Chymist. But in order to shew, that by compounding one Menstruum with another, new and excellent Salts may be procured, let it be observed, that regenerated Tartar, properly prepared, may be intimately united with pure *Alcohol*, and thus produce a vegetable Menstruum, composed of the close Union of the most subtile vegetable Particles, an Alkali, an Acid, and a Sulphur. Whence the Effect of such a Liquor is extremely great, both as a Medicine, and a Menstruum. From what has been said we may infer,

That it is not certain, whether any Menstruum has a Power of dissolving any Subject, without the Assistance of Fire, since no Experiment could ever be made in a Place destitute of all Fire, and as most of the known Menstruums act the

better when assisted by a certain Degree of Fire.

That Menstruums can scarcely act as such, unless they are reduced to a fluid Form, or at least approach to it, as they generally do by Means of Fire, Air, Water, and Trituration, which four Causes usually excite the latent Powers of Menstruums.

That the Acrimony of a Menstruum, which excites Pain, corrodes and consumes the Parts of the human Body, is no Proof that such a Menstruum is suited to dissolve other Bodies. Thus the Oil of Vitriol, Spirit of Nitre, Spirit of Salt, and *Aqua Regia*, readily consume the Flesh, yet they do not dissolve Wax and Sulphur, tho' these two may be easily dissolved in human Bodies.

That many Bodies incapable of Dissolution in certain Menstruums, may be fitted for a Dissolution in them, by being previously dissolved in another Menstruum. Thus if common Sulphur is boiled ever so long in Alcohol, it is no more dissolved than a Stone in Water; but if it is first melted with Salt of Tartar, it is soon dissolved by cold *Alcohol*.

That certain Menstruums dissolve such Bodies, as before Trial they were thought little suited to, and this holds true both of the Solvent and Solvend. Thus the viscid and tenacious Body of native Turpentine is so penetrating in the Body, as soon to give a Violet Smell to the Urine, change its Colour, and warm the Person who takes it. It also dissolves Oils and Resins with a gentle Heat, and even gummy Resins, which can hardly be dissolved otherwise.

The Yolk of an Egg would hardly be suspected of any solvent Power, from its most perceptible and obvious Properties, yet by being ground

ground with any of the Oils, Gums, Refins or Balsams, it dissolves them better than any other Menstruum, destroys their Tenacity, renders them miscible with aqueous and spirituous Liquors, and fit to enter the circulating Fluids of Animals. The White of an Egg, boiled to Hardness, and distilled in *Balneo Mariæ*, affords a limpid aqueous Liquor, of no considerable Smell or Taste, and of no saline Acid, or alkaline Nature; yet what a considerable Power it may have upon Metals, appears from *Paracelsus*, and *Helmont*, who judged it the most proper Thing, in preparing their medicated Mercury; and if the White of an Egg after boiling, be suffered to run *per Deliquium*, it runs to a Kind of pure Water, which dissolves the hard, tough Substance of Myrrh, better than any other Menstruum.

That Acidity, Acrimony, or a saline Property, in any Menstruum, can never assure us, that such a Menstruum will dissolve a given Body, till we find by particular Experience, that a Solution ensues, upon putting the Bodies together. Thus if any known Acid, whether strong or weak, be put to common Sulphur, and assisted by Heat, it will not dissolve the Sulphur. Thus Spirit of Nitre, which dissolves other Metals, does not touch Gold, so that we cannot say that Acids, Alkalies, or Salts, are universally Solvents, but only with Respect, to their determinate, definite Subjects, to which Nature has fitted and limited them.

That a cautious Physician, upon finding a Body dissolved, will not thence infer, that an Acid, an Alkali, or a neutral Salt, was the Cause of the Solution, unless other Circumstances, determine which of them it is; for suppose a Person,

sure that Gold was dissolved, into its least Particles, and that there was no other known Salt, which would dissolve Gold, besides Sea-Salt, or the Preparations of it, yet he could not justly infer, that in this Case the Sea-Salt is the only Solvent; for pure Quick-silver, also, dissolves Gold, tho' Quick-silver, be as far from an Acid, Alkaline, or acrimonious saline Nature, as any known Substance in the World.

That there is no general, or absolute dissolving, or corrosive Acrimony, this being always relative, and holding only true, of the Solvent, and Solvend, and not of the Solvent with respect to all other Bodies. If upon seeing the corrosive Virtue of *Aqua Fortis* in a thousand Instances, we should conclude that it would dissolve all other soft and tender Substances, we might soon correct our Error, by observing that it will not dissolve soft Wax, or brittle Sulphur.

That we ought not to infer, that because a Menstruum proves innocent to the human Body, it will not therefore dissolve other Bodies; for Oil of Olives, may be safely taken into the Stomach, tho' it readily dissolves Sulphur, and Wax, which Acids will not touch; so that tho' the Cancer, and the Stone have hitherto proved incurable, yet we ought not to despair of finding Remedies for them, and particularly of finding a Method of dissolving the Stone without injuring the Bladder, since it by no Means follows that the Bladder should be corroded, by the same Remedy which dissolves the Stone.

That most Menstruums, at the Time they dissolve, and change the Subject, are also changed by it, the Action being reciprocal, and tho' Water, Alcohol, and Mercury, receive but little Alteration, yet

they are gradually chang'd in the Operation.

That it is an Error to suppose, that the purer any Menstruums are made, the more purely and perfectly they always dissolve, because their solvent Power is often diminish'd, in Proportion to their Purification. Thus Lead is the more difficultly dissolv'd in *Aqua Fortis*, the more strong the *Aqua Fortis* is made, and the more easily when the Menstruum is diluted with a due Proportion of Water. And

That there is nothing more re-

markable in the Doctrine of Menstruums, than the Production of new Powers by their Action, which before existed not either in the Solvent or Solvend; but depend entirely upon the Union of both after the Solution is perform'd. Thus an Infant may safely swallow a few Grains of Quick Silver, or a very few Drops of the Spirit of Salt, but if those are so united as to form corrosive Sublimate, three or four Grains of this last will prove a violent Poison.

CHAP. VIII.

Of CALCINATION.

CALCINATION, by some called, Chymical Corrosion, is that Operation in Chymistry, which produces a Destruction of the former Connection and Cohesion of all the Particles of Bodies, together with a Change of Colour, Smell, Taste, and other Qualities of a like Nature, depending upon the entire Texture of the whole Body; so that the Bodies subjected to this Operation, are reduc'd to a Powder, or into small Portions, or at least become friable; for which Reason, Calcination is, also, called, a chymical Pulverisation. Thus by *Et-muller*, Calcination is defin'd, "A Corrosion and Dissolution of compact Bodies, into their minutest Parts, by which Metals and Minerals are reduc'd to a Calx, and Vegetables to Ashes, or at least, whereby the Body, whatever it is, becomes friable."

Calcination receives different Names, according to the various

Manners in which it is perform'd; and the Effects resulting from these several Methods, are no less various, than the several Names, the Methods themselves have received. In that Method, which by Way of Eminence, we commonly call, *Calcination*, the combustible Parts of the Bodies, are consum'd, by being expos'd either to the common Fire, or to that of the Sun, while such Parts as elude the Action of the Heat, are left behind, and this may be properly call'd *Calcination by actual Fire*. Of this Kind, are not only the *Calcinations* of metallic and other mineral Substances, but also the Incineration observable in the Desflagration of Vegetables, for preparing lixivial Salts, and in the Calcination of some Animals, as Crabs, Moles, and others of a like Nature. *Calcination*, is call'd *Ussion*, when applied to Harts-horn, Alum, and Brass; and these Substances themselves, are distinguish'd by

by the Epithet, *Burnt*. This Operation, is, also, call'd, *Toasting*, when applied to Rhubarb, and some other Substances: When Bodies are rarified, and reduc'd to a Powder, by the Reflexion of Flame or Heat from the Sides and Top of a Furnace, *Calcination* is, in this Case, call'd *Reverberation*, and when common Salt is calcin'd, *Decrepitation* is the Term which Custom has made expressive of the Thing.

Another Species of *Calcination*, is perform'd by the Addition of proper Menstruums, either with, or without the Assistance of Fire, and this is properly call'd *Corrosion*, or *Calcination by potential Fire*. Of this Kind are, First, The immersive and vaporose Calcinations, or Corrosions of Bodies; when, for Instance, the Body to be calcin'd, is either immers'd in its proper Menstruum, as Copper in Spirit of Nitre, and Lead in Vinegar; or when the Body is suspended in a close Vessel in such a Manner, that the Steams arising from the Menstruum may act upon it; as when Iron is suspended over *Aqua Fortis*, in Order to be calcin'd into Crocus of Mars; or when Copper and Lead are suspended over Vinegar, in Order to be converted into Verdigrase, and Ceruss. Of this Kind, in a particular Manner, is, that Species of Calcination, call'd, *Philosophical Calcination*, or *Calcination without Fire*; when some Parts of Animals, as Bones, Horns, and Hoofs, are in the Distillation of Waters suspended in the Head of the Still, that being penetrated by the ascending Vapour, they may become more porous and friable. But in the Shops, Bones are not for the most Part philosophically calcin'd in an Alembic, but boil'd in Water till they are render'd soft and friable by the Hand. Then after they are cleans'd, and the black exterior

Scurf taken off, they are dried, and reduced to a Powder. The *Cornu Cervi philosophicum*, the human Cranium, the Tooth of the Boar, and that of the Sea-horse, are thus prepar'd. Secondly, To the *Calcination by potential Fire*, belongs that, by *Illinitio*, when neither the Steam of the Menstruum, nor Immersion in it are us'd, but the Body to be calcin'd, is only anointed with it, as when Oil or Spirit of Vitriol, or of Sulphur, are laid upon a Plate of Iron, in Order to produce a Corrosion. Thirdly, To the same Kind of Calcination, belongs *Amalgamation*. Fourthly, *Fumigation*. Fifthly, *Detonation*. Sixthly, *Granulation*, which is also call'd, *fusory Calcination*. Seventhly, *Cementation*, or *Stratification*. Eighthly, *Extinction*, or *extinctory Calcination*, as when ignited Crystal is extinguished in common Water, and then reduc'd to a Powder. That Species of *Calcination*, which is perform'd by Fire alone, or by Means of a dry Menstruum, is call'd, *dry Calcination*; whereas, that which is perform'd by Means of a liquid Menstruum, is call'd, a *moist or humid Calcination*. *Bohnus*, calls that Species of *Calcination* perform'd by Fire with the Addition of a Menstruum, *mixed Calcination*. The Calcinations of Minerals perform'd by the Air, or rather in the Air, do not constitute a particular Class, but are to be rank'd among those perform'd by a liquid Menstruum; because such a Menstruum, capable of calcining metallic Bodies is lodg'd in the Air; whilst, for Instance, the saline corrosive Particles with which it is impregnated, being dissolv'd by its humid Parts, and applied to the metallic Body, corrode it; or whilst the Humidity of the Air itself, penetrates the saline Parts of the mineral Body, dissolves, and puts them into such a Commotion, that they

they corrode, and, as it were, calcine the Body in which they reside.

From what has been said, 'tis sufficiently obvious, not only what a *Calx* is, but, also, that the several Species of *Calxes* must vary.

First, According to the Substances or Bodies, from which they are obtain'd.

Secondly, According to the Nature of the particular Menstruum us'd in the Preparation. And

Thirdly, According to the greater or smaller Degree of Fire applied; or according to the greater or smaller Quantities of humid inflammable Parts expell'd; or according as the Parts of the Bodies, are more or less divided by the Calcination.

'Tis also obvious, that all Calcinations of Bodies are perform'd by taking away the aqueous, oleous, and combustible Substances, connecting the Parts with each other, or by interposing some foreign and heterogeneous Substance, which destroys the Connection and Cohesion of the Parts. From what has been said, we may also conceive, how in some calcin'd Bodies, something is lost, that is, those Parts which can either be destroy'd or exhal'd by the Fire; and how in some others there

is an Addition made, by Means of the Menstruums, of which they retain some Parts in the Calcination, and consequently have their Weight increas'd. Hence we may, also, comprehend how some *Calxes* by the Expulsion of that Part of the Menstruum which they retain, may be restor'd to their original Form, and how some others may be so, by a Restitution of what they lost in the Calcination. Of the former Kind, are the *Calxes* of Metals produced by corrosive Menstruums; and of the latter Sort are metallic *Calxes* produc'd by Fire alone. 'Tis an Observation of no small Importance in Medicine, that as Substances calcin'd by Menstruums, or what we call potential Fire, retain something of the Menstruum employ'd, by which a Change is induced on their Natures, which are to be judg'd of by the respective Menstruums us'd, so, also, Substances calcin'd by actual Fire, undergo a certain Change, and assume an acrid, heating, and drying Nature, which they before were destitute of. Thus Shells when calcin'd become Lime, and have very different Effects in Medicine, from the same Substances reduc'd to Powder by Trituration.

CH A P. IX.

Of CLARIFICATION.

THE Apothecaries are said to clarify any thick and turbid Liquors, the express'd Juices of Vegetables, for Instance, Decoctions, or Syrups, when they render them more transparent, pure, and free from Feces. There are many Ways of doing this, as by setting the Liquor in a cool Place, and suf-

fering it to settle for some Time, that the earthy and feculent Parts may gradually and spontaneously subside to the Bottom: This is by Chymists call'd *Clarificatio per Subsidentiam*, or *Clarificatio per Residentiam*. Liquors are, also, clarified by Filtration or Colation, by which Method the grosser Parts remain in the

the Filtre, whilst the finer and more subtle pass thro' it. Fermentation is, also, another Method of clarifying Liquors, since by the fermentative Motion, the grosser Parts are carried to the Bottom. Another Method of Clarification is by the Affusion of other Liquors, according to the Nature of the Liquid to be clarified, by which Means being render'd turbid, and a Precipitation produc'd, it becomes more clear and pure.

Another Method of clarifying Liquors, is to beat them, with the Whites of Eggs, to a Froth, and then to boil them; for by this Means the gross Parts, which render the Liquor turbid and foul, will rise to the Top, together with the Egg, in the Form of a Scum, which may be taken off with a

Spoon, or separated from it by straining.

This Method renders a Medicine more slightly and neat, but in no Degree augments its Virtues, and in many Cases impairs them; as wherever they depend upon a mucilaginous and viscid Texture, which, by Clarification, is in a great Measure destroy'd. Thus Quincy remarks, that the Clarification of the Decoction for the Syrup of Marsh Mallows, absolutely spoils the Medicine, by destroying that mucilaginous Contexture, upon which its Virtues depend; and that to clarify a Decoction of Poppies for the *Diacodium*, is to take from it, the principal Part of the Efficacy, expected to be communicated to it from the Poppy, for the like Reasons.

CHAP. X.

Of CORRECTION.

THE Word *Correction* in Pharmacy has several Ideas affixed to it; thus drastic Medicines, or such as operate with Violence, are said to be corrected, when in their Composition, some Ingredient, is added, which proves a Kind of Check or Ballance to their violent Operation, or prevents the Mistortunes which they generally bring on without such a correcting Ingredient. Thus, for Instance, some Carminatives, such as the Seeds of Fennel or Anise, are added to Senna Leaves, which, when exhibited alone, generally produce Flatulences and Gripes.

Correctors have a Reference either to the noxious Quality, the Viscidity and Toughness, the Coldness,

the narcotic Nature, the emetic Virtue, or the violent Operation of the Medicines. to which they are added. 'Tis therefore, sufficiently obvious, that Correctors must consist of such Parts as are of an opposite Nature to those which prevail in the Substances to be corrected. Thus, for Instance, Alcalies are corrected by Acids, Acids by Alcalies, and Substances of any given Nature by those of directly opposite Qualities. The universal Correctors of such Medicines as operate too violently, are, First, Water, which dilutes Acrimony; and Secondly, mild and balsamic Oils, which obtund and sheath up the stimulating and irritating Spicula of any Medicine. To this Species of Correction,

Correction, also, belongs such a Preparation of Medicines, as weakens or impairs their violent and drastic Operation; when, for Instance, the Root of Arum is rendered milder, and less violent in its Operation, by being dried, or macerated in some proper Liquor: But Corrections are sometimes boasted of in Consequence of an Ignorance of the Nature of Medicines, to which Correctors are added; when, for Example, Opium is thought to be corrected by Castor, and an Addition of other heating and aromatic Substances, because the Antients imagin'd, that Opium prov'd prejudicial by its excessive Coldness. Thus, also, some Corrections are made, which rather deserve the Name of *Castrations*, as, when the Seeds of Coriander or Cumin, are macerated in Vinegar. According to *Helmont*, some boil Scammony in acid Liquors, in Order to correct, or render it more mild in its Operations: But every one, who is in the least vers'd in medicinal Affairs, knows, that when Scammony is expos'd to the acid Steam of Sulphur, it is entirely divested of its Properties, and recedes from the Nature of Scammony in Proportion to the Quantity of the Acid it has imbib'd. With Respect, therefore, to such Corrections, we may affirm, that they are made without any Knowledge of Qualities, Parts, and mutual Relations of the Correctors, and Substances to be corrected. It is surprizing, that some Substances should by Correction, have their Qualities and medi-

cinal Virtues directly inverted and revers'd, which happens to Asarabacca upon being boil'd.

Medicines which operate in a slow and languid Manner, are, also, said to be corrected, when they are so prepar'd, as either to accelerate, or augment their Operation; as when Salts are mix'd with evacuating Medicines of a gummy and viscous Nature, that by this Means being more resolv'd or attenuated, they may operate more powerfully. Thus with this very Intention, Salt of Tartar, or Sal Prolychrestus, are added to Infusions of Senna, and Ingredients added with this View, are call'd *Adjuvantia*, assisting Medicines. But when more drastic Substances of the same Virtues are added, in order to augment the Operation of the Composition, these additional Ingredients are call'd *Acuentia*, or sharpening Medicines.

Nauseous and ungrateful Medicines are said to be corrected, when they are prepared in such a Manner as to become more acceptable and agreeable to the Palate. But as the Sense of Taste is not the same in all Mankind, the Corrections of this Sort must necessarily vary according to the peculiar Taste of different Patients. Medicines intended for Children, are generally corrected or rendered agreeable, by an Addition of Sugar. In like Manner Substances of an ungrateful and disagreeable Smell, are to be corrected by an Addition of fragrant Ingredients, of an agreeable Smell.

C H A P. XI.

Of CRYSTALLIZATION.

CRYSTALLIZATION is that particular Operation, by which the Solid Parts, which in any Fluid are highly attenuated, extended, or disengag'd, are reduc'd to a Body which is dry, hard, compact, diaphonous, or at least semi-diaphonous, and either foliaceous, or of some geometrical Figure, such as cubical, prismatical, or conical.

The Crystallization of Salts and saline Substances, is perform'd, when a Liquor which is generally aqueous, and contains a Salt dissolved in it, is depurated, and inspissated by a slow and continued Evaporation, till a Pellicle appears on its Surface, which may be called the first Beginning of Crystallization: The Evaporation is generally thought to be completed, when a Drop of the Solution pour'd upon the Nail of the Finger, or any cold Substance, is forthwith concreted into a Salt. The Evaporation may be perform'd either by the Fire, or the Heat of the Sun, in which last Manner, Sea-Salt is better crystallized than any other. This Evaporation must be made in large mouth'd Vessels, the best of which are glass, and the next to those are earthen Pots well bak'd, and such as will not suffer the Salts to pass thro' their Pores. But mettall Vessels are corroded by the Salts, and subject to be spoil'd by Rust. The inspissated Liquor is to be deposited in some cool Place, and kept in Vessels of Glass, Wood, or Earth, with considerably large Mouths, that the crystalliz'd Matter may be the more

commodiously taken out. Some Time after, the latent Particles of Salt dispers'd thro' the Liquor, are approximated, brought together, and at the Sides of the Vessel form saline Crystals, which are greater or smaller according to the Quantity of the Solution. In either Case all the Crystals are not equally large, but are endowed with the Figure peculiar to each Salt, single, beautifully shining, and the more elegant and large, the more slowly the Evaporation has been made. But the whole saline Substance is not found form'd into Crystals, but there is a large Number of irregular Concretions, especially in that Base, in which the larger Crystals are planted, and which seems to be, as it were, the Matrix, from which these Crystals arise. Nor is all the dissolved Salt, which was in the Liquor, form'd into Crystals, but a Quantity of it remains sufficient to saturate the Fluid; hence when the Crystals form'd are taken out, there is a Necessity for a new Evaporation, and the Liquor must be lodged in a cool Place, in Order to obtain more Crystals; and these Measures are to be repeated, till no more Crystals can possibly be form'd. But since, for the Purposes of Crystallization, some Quantity of Fluid is always required, the Salt cannot possibly be totally extracted from the Liquor by Crystallization; but Exsiccation becomes necessary for drawing off the Remainder. Sometimes, in Order to obtain the more elegant Crystals, Twigs are put into the Vessel, or Threads

Threads are stretched in it as proper Supports, to which they may adhere, as is usual in collecting the Crystals of Alum, Copper, and Sugar. The collected Crystals are in the Shops dried on coarse Paper, by the Heat of the Sun. These, however carefully they may be freed from the Humidity adhering to their Surfaces, scarce afford to genuine a Salt, but that it contains some Mixture of Earth and Water. This supplies the Place of a Glue or Calx, for uniting, as it were, the saline Crystals, for the Union is dissolv'd when the Water is expell'd, or by Calcination, as we may observe in decrepitated Sea-Salt, Alum, and Vitriol calcined. Some Salts undergo a better and more perfect Crystallization, when, to their Solution, a calcarious Earth is added, as is proved by *Geoffroy* in the Substance of Borax, those Salts to which an Oil adheres, are unfit for Crystallization, and proportionally more so according to its Quantity, because the Oil interposed between the small Portions of Matter, by its Tenacity prevents the Union of the similar Particles, and if in some Measure, they should happen to unite, yet they never acquire a due Degree of Solidity, but are forthwith melted down, on the Access or Contact of a moist Air. Hence the Salters of Herrings take Care, that in Boiling no Fat be mix'd with the Salt Water; and skilful Chymists, when they suspect an Admixture of oleous and pinguious Parts, after a proper Evaporation pour Spirit of Wine upon it, which dissolves the oleous Parts, receives them, as it were, into its Bosom, and so separates them from the saline, by which Means they facilitate the Concretion of the Crystals. This Observation is of singular Use to Physicians, with Respect to the Formation of Stones in the human Body, and points out the most effec-

tual Remedies, by which their Concretion may be prevented. Hence we learn, that Salts, divested of all pinguious Parts, are most easily crystallized. The white Colour of the saline Crystals is somewhat darkened by the adhering Oil; this Colour is also variegated by metalline Particles, almost infinitely divided, and combined with their solvent Salt, as appears in the blueish Vitriol of Copper, and the green Vitriol of Iron, which consists of a Metal, which is kept dissolved by an acid Salt, and a little pure Water.

The Use of saline Crystallizations is.

First, To separate Salts, in a dry Form, from their solvent Liquor.

Secondly, To depurate Salts; for the Water, leaving the Sordes, retains the Salts; for which Reason, the better these are depurated, the more elegant Crystals they yield in Crystallization.

The *Ætiology* of these Crystallizations is obvious, if we consider, that in order to their Production, there is requisite too small a Quantity of Water, to keep them dissolved; Secondly, the Rest of the particular Liquor, in which the dissolved Salt is lodged; and thirdly Cold, for when the solvent Menstruum begins to prove defective a slender Pellicle is form'd on the Surface of the saline Parts, which can no longer be kept in a State of Solution by the Liquor. Then this Pellicle becomes gradually thicker, till at last becoming specifically heavier than the rest of the Solution, it is broken into different Parts, subsides, and forms itself into different Molecules, or Crystals, of different Bulks, which could not be produced, unless the Liquor was in a State of Rest, because then the Principle of Solution, which is Motion, proving defective, nothing hinders the Approach of the saline Parts to each other

other, for as the Want or Defect of Humidity, hangs the Parts nearer to each other, it consequently lays a Foundation for their Union. Thus the Diminution of Motion renders the Fluid unfit for separating the Parts, when they happen to adhere. But when Liquors are compressed by the cold Air, many of the Particles flying off from the solvent Liquor, the contained saline Parts, are by the Constriction, more and more expelled, and thrown out from the Pores of the fluid Mass, and the more intense the Cold is, the larger Crystals are formed, but these are continually mov'd upon the Accession of Heat. Hence it happens, that in a warm Air, very small Crystals are generally formed. Crystallization is therefore performed, when a sufficient Quantity of Moisture, Motion, and Heat, which are the Causes of Solution, prove defective. Crystallization indeed of Salts happen, when their highly saturated, and warm Solutions are left to themselves, in which manner volatile Salts, such as that of Harts-horn, Vipers, and Silk, and others obtained from the animal Kingdom, are crystallized. But these are very near to a State of Crystallization for the Evaporation is performed with the Design, that the Solution which remains after the Diminution of the Liquor may become more saturated. But even in an highly saturated Solution, a very small Quantity of Crystals are formed without a previous Evaporation. 'Tis therefore obvious that Evaporation, that is a Diminution of the solvent Liquor, is absolutely necessary to the Crystallization of any Salt. Hence, also, it is obvious, why in a Receiver from which the Air is extracted, as also in a close stop'd Vessel, Crystals are not formed; because in these Cases, a very small Evaporation or none at all is made. We must carefully consider, that the

Crystals of Salts, peculiar to each Species, are not obtained by every Kind of Concretion, for when the Solution of any Salt sufficiently warm is suddenly cooled, when for Instance the Vessel containing it, is put into cold Water, the dissolved Salt lodged in the Liquor, is precipitated to the Bottom, in the Form of a Powder, for then the Solution is, with a Kind of Impetus, condensed, and forced too precipitately to deposite its Salts; nor does the Salt acquire its peculiar Figure by a sudden and continued Evaporation on the Fire, till the whole Liquor is totally exhale'd, or at least rendered thicker than it ought to be, for the Heat exciting a preternatural Commotion in all the Parts, hinders the saline Parts from receding from each other, but being forced to run, in all Directions, with a tumultuous Confusion, and being preposterously mixed, they are formed into less elegant Crystals. As therefore a precipitate Refrigeration so also an intense Heat hinders Crystallization, the best Evaporation is made without boiling, and the Place fittest for Refrigeration, is that which is of the same Temperature with Cellars about the Months of *June* and *July*. But there are some Salts, which are more commodiously crystallized in pretty warm Air, such as rich and acid Alcaline Salts; and for the Crystallization of Sugar in the Pans, a pretty brisk Heat is necessary, perhaps because Salts of this kind require little Moisture for their Solution, and retain it closely, which must be afterwards lessened by Evaporation, and a Continuation of the Heat, for it must be observed that the Salts which require a large Quantity of Water to keep them dissolved, are first formed into Crystals; on the contrary they more easily and quickly and with the smaller Quantity of Water Salts are dissolved, the more firmly

ly they seem to retain the Water they receive. Salt of Tartar, for Instance, which of all Salts requires the smallest Quantity of Water, for its Solution. Hence if different Salts are dissolved in the same Water, some of them will be formed into Concretions sooner than others, and each of them will be distinguished by the particular Figure of its Crystals. Thus for Instance, the Crystals of common Salt are quadrilateral Pyramids, with a square Base; those of Sugar are oblong, and have rectangular Bases; the Hexagonal Crystals arising in Alum, have also hexagonal Bases; the Crystals of Vitriols, for the most part resemble Ificles variously interwoven, and Polygons interposed, or lying between them, Sal-ammoniac elegantly resembles the Branches of a Tree; and Salt of Hartshorn, Arrows placed in a Quiver; in the Sal Mirabilis Glauberi, which is made of common Salt and Vitriol, the Figures of both Salts are exhibited; Nitre is formed into prismatical Columns, not unlike Faggots of Wood, and between these are some Figures, sometimes Rhomboidal, and sometimes pentagonal, which seem to approach pretty near to common Salt. In the Salt of Tin, small Lines like Pins, so run out in every Direction from the Center, as to from a Star, such as that observed in the martial Regulus of Antimony. 'Tis surprizing that the Crystals of the same Salt, should be perpetually formed in the same Figure, *Willis*, in order to account for this Phenomenon affirms, that the Author of Nature granted such particular Modes of Figuration to Salts, as well as other natural Concretions according to the Prepollence of the Spirit or Salt, and their Commixture with the other Principles; but this is no more than a formal and explicit Declaration, that we are ignorant of the physical Cause of

this surprizing Appearance. *Muschenbrock* also denies, that this has hitherto been accounted for by any one, any more than this other Phenomenon, Why green Vitriol, and Alum, dissolved and mixed with Water, returns to their own Crystals, and do not become a third Salt, of a different Kind. If it should be asked, why sometimes the Weight of Salt used in the Solution, is diminished in the concreted and dried Crystals, we answer with *Gulielmini*, that the Salt is so easily dissolved in the Water, that the aqueous Exhalation, especially when rising in large Quantities from the Water, may contain some of the dissolved Particles of the Salt, especially if they are very minute and fine, like those sent up by Water, when in a State of violent Ebullition, and Evaporation. As much Salt, therefore, as is carried off by the Exhalation, so much must be wanting or defective in the concreted Crystals. Some who are fond of reducing Phenomena to a certain Cause, in order to explain saline Crystallizations, think the Principle of Attraction, best calculated and adapted to explain saline Crystallizations; they affirm that the Parts of the Salt, dissolved in a large Quantity of Water, are more attracted by the Particles of the Water, than by each other, and remain separate from each other for a considerable time; but after a large Quantity of the Water is expelled in Vapours, and a small Pellicule of Salts begins to be formed on the Surface, since the saline Parts are brought nearer to each other, and almost into a mutual Contact, and as the Fore of Attraction is greatest during the Contact, this Pellicule more strongly attracts the Salt from the subjacent Water, than an equal Quantity of Solution which consists partly of Water, and partly of Salt. When this Pellicule becomes speci-

fically

fically heavier by Inspissation, it is broken into Parts, subsides, and by attracting the saline Parts to itself, exhibits Crystals, which they say, are not form'd into Concretions, so long as the Solution is warm, because so long as the Motion excited by Heat remains, the Whole of that Motion which ought to be produced by the attractive Force is hinder'd and destroy'd; but since the Figures of the most simple Parts remain invariably the same, 'tis necessary the Form of the Bodies into which they are concreted, should also be the same. And because on one Side of the same saline Particle, the

attractive Force is greater than on the other, the Concretion always happens on those which attracts most powerfully: Hence it may be demonstrated, that the Figures of the minute constituent Particles, is different from that of the Crystal itself. From what has been said, 'tis sufficiently obvious, that Crystallization may be called a Species of Coagulation, and that it is a surprising geometrical Operation of Nature, in which she exhibits herself to the Eye of the Spectator, not in a false and varnish'd, but in her genuine and real Dress.

C H A P. XII.

Of DETONATION.

DETONATION may be look'd upon as a Kind of Calcination, perform'd in the Fire, by Means of Nitre, and other sulphureous Substances. Thus, for Instance, the Detonation of Antimony is made with Nitre, in the Preparation of diaphoretic Antimony, Cerus of Antimony, and the *Crocus Metallorum*. A Detonation, also, happens when Tin is mix'd with Nitre or Sulphur, since on that Occasion the sulphureous Part of the Tin is kindled and deflagrated by the Nitre. The same happens with Copper, and a similar Detonation is observ'd in the Preparation of fix'd Nitre, or the *Sal Polychrestus*, when the Charcoal is added to the Nitre in Fusion.

If metallic or mineral Substances

are subjected to such a Detonation, Calxes or Crocuses are produced; because in Consequence of the acid and nitrous Particles intimately interspers'd in their Pores, they are converted into a solid white Powder, which, by the Addition of a sulphureous *Alkali*, is easily restor'd to its original Form, whether of a Metal or a Mineral. By a repeated Ignition and Extinction in Water, solid Bodies, especially Stones, Flints, Crystals, and Corals, are converted into a quick Lime, or a calciform Powder; because the Fire, which by its violent Motion enters their Pores, attempts a certain Rarefaction, whilst, at the same Time, the aqueous Fluid, by its more impetuous Motion, produces a Divulsion of their most minute Parts.

C H A P. XIII.

Of DIGESTION.

SOLUTION is that Operation, by which the Cement which holds together the Particles of a solid consistent Body, is so destroy'd or alter'd by a proper Menstruum, as to permit the Particles thereof, to be so minutely divided, as to unite intimately with the Solvent, and be equably and invisibly suspended therein. In Order to bring this about, Heat is always necessary; but sometimes the Heat of the Atmosphere being not sufficient, the Solvent and Solvend included in a proper Vessel, are expos'd for a Time to a due Degree of Fire, which is generally very gentle, in Order to promote the Solution. And this is call'd Digestion. This is the common Acceptation of the Term; but in general it imports the Application of a gentle continu'd Heat, to any Body included in a Vessel, that is intended to be acted upon; tho' not with a View to Solution; as when two or more Liquors are expos'd in this Manner to a Heat, in Order to unite them the more intimately. In this Operation, for whatever Purposes design'd, the Fire rarifies and agitates the Air, Water, and whatever else is contain'd both in the Solvend and Solvent, and makes the constituent Particles of the Body to be dissolved, recede from each other, by which Means the Menstruum has a more easy Ingress into the Pores, where by its Rarefaction, and increas'd Activity, it produces greater Effects, than it could do in a less Degree of Heat.

To this Article, *Circulation* may be refer'd, which is perform'd in a particular Species of glass Vessel, call'd a *Circulatory*, in which the contain'd Liquor, when put over the Fire, performs certain Gyration, and circulates by ascending and descending, in such a Manner, that the more volatile Part of the Liquor rais'd by the Fire, not finding a Passage, may always fall back; a Pelican constitutes such a Vessel. But in the Room of these, we may substitute Phials with long Necks, hermetically seal'd; or a Cucurbit with a blind Alembic plac'd upon it; or a Cucurbit or glass Bottle with a sufficiently long Neck is so dispos'd, that having first put in the Materials, another lesser Phial, whose Neck may enter it, is placed upon it. Then the Joynings are to be carefully luted, after the Vessels and Materials are become sufficiently warm for carrying on the Process; for then the Air being heated and expanding itself, goes out of the Vessels, the Joynings of which being afterwards luted, the Fire may safely be rais'd and continu'd at Pleasure. But in this Process it generally happens, that the Liquor falling cold on the warm Bottom of the Glass, cracks it; for which Reason, we must proceed cautiously in raising the Fire. Hence 'tis obvious, that what we commonly call *Circulation*, is no more than a certain Species of Digestion, and that to circulate a Liquor is to put it in Digestion, that its more volatile Parts may be continually rais'd and fall back, and thus

thus passing as it were in a Circle, may become finer and more attenuated. According to *Sennertus*, Circulation is only us'd for those Liquors, which are already depurated, or freed from their Feces; or at least whose highest Degree of Subtilization is required. Thus the rectified Spirit of Wine is, by Circulation, said to be transform'd into what we call the Quintessence. According to *Barnerus*, Circulation is principally instituted for two Reasons, the first of which is, that the Spirits and Liquors to be joyn'd, being driven backwards and forwards, may be the more effectually incorporated. The Second is, That any Substance to be disengag'd from its Essence, or the Liquor in which it

is contain'd, may be the sooner and more effectually separated from it. Since, then, Circulation is no more than a Species of Digestion, 'tis obvious, as *Hoffman* observes, that the Subjects of this Operation, may be either Liquids alone, or Solids mix'd with Liquids, either for the Purposes of Clarification, Depuration, Exaltation, or Maturation; and sometimes to obtain the Volatilization of fix'd Substances, or the Fixation of such as are volatile: But the Vessels must be very closely joyn'd, or hermetically seal'd, and a proper Time allow'd for the several different Intentions of the Operator. That this Process may be supplied by repeated Distillations, is sufficiently obvious.

C H A P. XIV.

Of DISTILLATION.

DISTILLATION may be justly defin'd, a close Evaporation; for Evaporation in an open Vessel, is exactly the same as Distillation in a close Vessel.

Every Distillation supposes Air and Heat, so that an Half, or a Third of the Vessel in which the Matter to be distill'd is plac'd, must necessarily be left empty.

The Air, rarified by the Heat, receives into its Pores the Fluid which is strongly agitated by the Heat, and its own intestine Motion, so that the Air ascending, raises along with it the most minute Particles of the Fluid, which being condens'd form a Liquor or Fluid.

There are Examples of Distillation perform'd without the Application of Fire; when, for Instance, highly rectified Spirit of Nitre is

pour'd upon highly rectified Spirit of Wine, an intense Heat is produced, and the Spirit of Nitre is rais'd in Vapours.

All Bodies incapable of Evaporation, or which do not emit Exhalations capable of being easily influenc'd by the warm aerial Fluid, are improper Subjects for Distillation. Of this Sort are Sugars, all Kinds of Earths, neutral Salts, Stones, and Bones. Neither can those Bodies be distill'd, which when agitated by Heat, diffuse no Smell; whereas those Substances which, when triturated or agitated, emit a Smell, may be distill'd; and the more penetrating the Smell is, the greater Quantity they yield, in Distillation, of an aqueous Fluid.

The more subtile Fluids are, the more easily they are distill'd: where-

as the more thick and heavy they are, they are rais'd with the greater Difficulty, and require the more Fire. Among all the Parts fit for rising, the phlogistic inflammable Spirits, and the volatile Salts rise first, whether by themselves or combined with ethereal Oils; and after these the aqueous Phlegm ascends. But Acids cannot be distilled without a greater Heat.

When Spirit of Wine is distilled, the Spirit first rises, and then the Phlegm; but when Vinegar, or any other acid Liquor, is distilled, the Phlegm is first discharged, and then an acid Spirit.

Among Acids, the most easily distilled are, the acid Spirit of Ants, then Spirit of Nitre, Spirit of Salt, Spirit of Vitriol, and Oil of Vitriol, which two last ought not to be distilled by an Alembic, but by a Retort.

Express'd Oils do not admit of Distillation with Water by the Worm; but ætherial, aromatic, and subtile Oils, are commodiously distilled in this Manner, but require a greater Degree of Heat.

Distillation is either moist or dry. Moist, when the Body to be distilled, is put into a fluid or spirituous Liquor; or when it is distilled alone, if it is a Fluid. But dry Distillation is, when the Body distilled is solid and dry; when, for Instance, Harts-horn, Amber, Ivory, Tartar, and Soot are distilled. Distillations, also, differ with Respect to the Degrees of Heat, and some are performed in Horfes Dung, the *Balneum Mariæ*, or Vapour-Bath; whilst others are accomplished by Means of Sand, Salt, Ashes, or the Filings of Iron.

That Distillation is most violent, which is performed in a naked Fire, in such a Manner as that the Fire acts immediately upon the Vessel, in which the Substance to be distilled, is contained; as in the Di-

stillation of Spirits from Salts. There are, also, Differences in Distillation with Respect to the Vessels, some of which are high, as Cucurbits, whether of Glas or Stone; and others low, as Retorts, and some others, either of Glas or Stone.

Those Substances whose Particles are subtile and easily evaporated, require but a gentle Heat; and may be distilled in tall Vessels. But such Substances as consist of more fixed Parts, and such as are not easily and speedily evaporated, require a greater Heat, and lower Vessels.

As various Bodies are subjected to this Operation with different Views, Chymists have contriv'd a great many Machines, to answer their Purposes. The first of these is the cold Still, as it is called, which consists of an Iron Grate, a few Inches above which, a Plate is fix'd, for the Reception of the Vegetable to be distill'd, which is cover'd with a large conical Pewter Head, furnish'd with a long Tube or Beak, that opens into the Head. When any fresh Vegetable is laid upon the Plate abovemention'd, and a very gentle Heat is excited in the Grate immediately below it, the Water together with the Spirit, or that volatile Substance, which imparts the distinguishing Smell and Taste to the Plant, evaporate, are collected in the Head, condens'd into Drops, and thence convey'd by the Beak to a Receiver, fix'd to the other End thereof. Mean Time the Plant loses all its Verdure, and Succulency, and the greatest Part of the Smell, and becomes shrivel'd, dry, and lighter than before.

Another Way of distilling, is by the *Alembic*, the whole Apparatus of which consists of a *Body*, or Vessel to contain the Ingredients to be distill'd, which is usually of Copper; to this a Head is exactly fitted, which opens into a long spiral Tube, call'd the

the Worm, which passes thro' a Tub, that is to be fill'd with Water, and comes out at the lower Part of the Side thereof, in Order to be join'd to a Receiver. When the *Body* is fill'd about two Thirds with the Vegetables to be distilled, and as much Water as will cover them, the Head is to be fitted exactly to the Receiver, and luted, so that no Vapour may pass thro' the Juncture. Then the Materials are to be digested for some Time, in a moderate Heat, which is to be afterwards rais'd gradually till they boil, upon which the volatile Parts arise in Vapour, and condense in the Head, and Worm, by which last they are convey'd to the Receiver, in the Form of Water, impregnated with the Spirits and Oils of the Plants employ'd in the Operation. The same Apparatus serves for the Distillation of vinous Spirits from fermented vegetable Juices, and of spirituous Waters.

Chymists, also, perform many Distillations by the Retort, which is a glass Vessel with a long Neck, bend'd in such a Manner, as to form nearly a right Angle with the Body of the Retort. In this, the Materials subjected to Distillation, are included, and the volatile Parts are

forc'd by the Fire into the Neck, which conveys them into the Receiver, fix'd and luted to the End thereof, where they are condens'd into the Form of a Liquor. The Retort and Receiver generally now supply the Place of the glass Body, and Head, or Alembic, formerly much in Use for the same Purposes.

But for such Substances as require a very intense Heat to make them rise, the most commodious Method of Distillation, is by the *Reverberatory*. For this Purpose, the Materials are included in an earthen Vessel shap'd much like a Bottle, and made so as to endure a very great Fire, call'd a *Long-Neck*; this is fix'd in the Wall of the Furnace, in such a Manner, that the Body is within Side, expos'd to the naked Fire, whilst the Neck coming thro' the Wall, is join'd with a Receiver on the other. But as all these Instruments are better understood in an Hour, by examining a Laboratory, than by all the Descriptions that can be given, I should advise those who desire a farther Knowledge of them, to learn it by inspecting them, and seeing the Operations perform'd by them.

CHAP. XV.

Of Effervescence and Ebullition.

EFFERVESCENCE, or Ebullition, is said to happen, when the most intense Motion is made, by Liquids mix'd with each other, or by Solids mix'd with Liquids, accompanied with a copious Elevation of Bubbles, an Eruetation of Vapours, and Smoke, and a more or less intense Heat.

The Cause of an Effervescence is the impetuous Discharge of the æreo-ætherial Fluid from the Pores of Bodies, whether Liquid or Solid; by which quick Motion, and Discharge of the ætherial Fluid, the Turgescence of the Liquor, the Heat and the Bubbles are produc'd.

Every Fluid does not produce an Effervescence with every other Fluid, nor every Liquid with a Solid, but only these Bodies produce an Effervescence with each other, whose Parts are disposed to enter the Pores of each other, that by this Means, the Æthereal Fluid lodged in them, may be expell'd copiously, and violently.

Every manifest Acid produces an Effervescence with Alcalies, whether saline, earthy, volatile, or fixed. The Effervescence between an acid, and alkaline Substance lasts but for a short Time, and the Tastes of both are abolished, and so tempered as to form a neutral Substance of a saline Taste.

All concentrated acid Spirits, totally freed from their aqueous Parts, such as Oil of Vitriol, Spirit of Nitre, and Spirit of Salt, produce an Effervescence with the most subtile, ethereal Oils, such as those of Turpentine, Cloves, Sassafras-Wood, and a Heat is generally excited.

The more sulphureous, concentrated acid Spirits are, such as concentrated Spirit of Nitre, the greater Heat they produce, and even take Flame, when joined with heavy ethereal Oils.

Acid Spirits concentrated with highly rectified Spirit of Wine, which is only an Oil, by Fermentation resolved in to aqueous Parts, excite the quickest Ebullition; unconcentrated Acids do not act on sulphureous ethereal Substances, but leave them untouched.

The Bodies of Metals and Minerals, with proper Acids, or such as have an Ingress into their Pores, in the very Act of Solution produce an Effervescence. Thus Gold produces an Effervescence with *Aqua Regia*, and Silver, Mercury, Copper, and Iron with *Aqua Fortis*, which Effervescence lasts till the particular Body is dissolved.

Every Effervescence does not depend upon Acids and Alcalies; for common Water poured upon highly calcined terreo-saline Bodies, such as Shells, Coral, burnt Stones, and Salt of Tartar, produces a violent Effervescence, because the Water, by its Weight, enters the Pores of the calcined Substances from which it forces the aereo-etherial Particles with a violent Force.

Recent and highly concentrated Oil of Vitriol, by an Addition of common Water, or of Ice, becomes hot, with a violent Effervescence; because the Oil of Vitriol is a concentrated acid Salt, which on Account of the great Quantity of æthereal Particles interperfed with the Acid, remains in a State of Fluidity. Then the Water takes Possession of its Pores, and expels this subtile ethereal Matter with Violence.

It is false to assert that an Acid produces an Effervescence with another, as Butter of Antimony, for Instance, with Spirit of Nitre, or Aqua Fortis. It is certain indeed that a violent Effervescence arises from their Admixture, but this does not proceed from the Acids mixed with each other, but from this, that the Acids mixed with each other constitute a Menstruum which acts upon the *Mercurius vitæ* lodg'd in the Pores of the Butter of Antimony.

All Effervescences are not accompanied with Heat, for some are entirely without it. Thus Chalk produces a considerable Effervescence without any Heat, with the Spirits of Nitre, Sal-ammoniac, Vitriol and Salt. This Effervescence may be stopt by an Affusion of highly rectified Spirit of Wine, which in a Moment acts upon the Acid, and unites with it, so as to render it milder.

C H A P. XVI.

Of EXTRACTION.

EXTRACTION, in Pharmacy, is the Separation of the pure, and medicinal Part of a Body, from the impure and unactive, by Means of a Menstruum which is capable of dissolving the Parts required, and leaving the rest untouched; and when the solvent Menstruum is separated from the dissolved Body, by Distillation, or Evaporation, the Remainder is called *An Extract*. All Medicines, whose Virtues consist in

Parts that are very volatile, are improper for this Operation, because such Parts evaporate in a Heat sufficient for performing it. All the Judgment required in this Process, consists in adapting the Menstruum to the Parts intended to be procured, and regulating the Degrees and Continuance of Heat necessary for the Solution, and subsequent Evaporation.

C H A P. XVII.

Of FERMENTATION.

BOERHAAVE very justly distinguishes Fermentation, from Effervescence and Putrefaction, and limits the Term *Fermentation*, to that intestine Motion in vegetable Fluids, which tends to the Production of an inflammable vinous Liquor, miscible with Water, and intoxicating; or an Acid unflammable Liquor called Vinegar. That which produces a vinous Liquor he calls the first Fermentation; that which generates Vinegar the second. He remarks, that all Vegetables are not disposed to Fermentation, for such as abound with a native alkaline Salt, or are easily changed into it, will not ferment, but are inclined to Putrefaction, as Onions, and Turnips; and that tho' all Fermentables will undergo Putrefaction, yet all Putre-

scibles are not capable of Fermentation.

This great Author divides fermentable Vegetables into different Classes. The first of these comprehends all those Seeds of Vegetables, which when ripe and dry, are reducible by Trituration to a fine Powder called Meal, and not to an oily Paste; and among these he reckons Seeds, which tho' they abound with a pinguious Oil, may be so changed by Art, as to be converted into a Meal of a less unctuous Nature. Under this Class are contained; first the Seeds of culmiferous, graminifolious, spicated Plants, called Corn; the Seeds of all those of the Cucumber kind, of Buck-Wheat, Flax, Lettice, and many others of the same Nature.

Secondly, The Seeds of almost all the leguminous, podded Plants with a papilionaceous, or any other Sort of Flower.

Thirdly, Nuts not too oily, as Almonds, Filberts, Chestnuts, Wall-nuts, and others of a like Kind; but when these abound with Oil, some Management is necessary in order to deprive them of Part of it, and this is best done by suffering them to begin to shoot, and then scorching them.

In order to dispose these to ferment, it is necessary to steep them when in their utmost Perfection, dry and entire, in Water, till they are swelled, and have imbibed all the Water they can. Then they are to be taken out, and laid in Heaps in an open airy Place, upon which a gentle Heat will be excited in the Mass, and the Seeds will begin to germinate, but the Germination must not be suffered to proceed too far, but must be stopped by spreading the Seeds abroad, that they may be ventilated, cooled and dried. Then they are to be dried in a Kiln. By this Means the Viscidity is destroyed, and the Body of the Seeds is so attenuated, as readily to permit the greatest Part thereof to be dissolved in Water. They are then ground, and afterwards infused in a due Proportion of Water.

The second Class includes all the pulpous Fruits, whose Juice when ripe, is of an acid Sweet, and which do not incline to a fetid alkaline Putrefaction. These require only to be trod, pressed, or pounded, that their Juices may be separated from them.

But if their Substance be too hard, they may be boiled in Water, and then reduced to a Pulp. Or if they are dry they may be rasped, and then pounded with Water to a Pulp.

The third Class comprehends all the Parts of all succulent Herbs, as

their Leaves, Flowers, Roots, and Stalks, which are spontaneously inclined to grow acid, rather than putrid. These are sufficiently prepared by being beat into a Pulp, whilst they are fresh and juicy, adding a small Quantity of Water, to render the Mass of a thinner Consistence.

The fourth Class contains all the fresh vegetable Juices expressed from the Fruits and Herbs of the second and third Classes. All the Management here required is to bring them to a due Consistence, by boiling them sufficiently, in a wide shallow Vessel, if too thin; and by adding Water to them if too thick.

Those vegetable Juices, which are inspissated into a saponaceous Kind of Substance, in the Form of a saline and pinguious Coagulum constitute the fifth Class. Among these are Manna, Honey, Cassia, Sugar, and several others. These only require Dilution with Water, in order to dispose them to ferment.

In all the Vegetables comprehended under these Classes, some certain physical Conditions are required, in order to render them the fitter for Fermentation. Thus they must first arrive at the utmost Perfection intended by Nature; for when they are harsh, crude, and watery, they are less disposed to ferment. They must, also, be but moderately oily, because very oily Substances, instead of fermenting, grow rancid; and those without any Oil, are unfit for Fermentation. They must not be too rough or astringent; and it is absolutely necessary, that they should be dissolvable in Water.

Many of the vegetable Substances mentioned above, spontaneously ferment, and frequently too much, so as to require a Check; but others ferment more sluggishly, so as to require the Addition of something to accelerate the Fermentation; and the Things

Things which answer this End are called *Ferments*. These are principally : First, The fresh Juices of Summer Fruits, which are so much disposed to Fermentation, that 'tis not easy to restrain them from it.

Secondly, Fresh Yeast, Barm, or Flowers of Malt Liquors, or Wine, which work up to the Top, during the Action of Fermentation; for these are very active, and greatly promote Fermentation, when mixed with other fermentable Liquors.

Thirdly, The same Yeast afterwards grown more ponderous, and sunk to the Bottom of the fermenting Liquor. This is very active, but not so much so as before.

Fourthly, Cassia, Manna, Honey, Sugar, and the like inspissated Juices.

Fifthly, The acid, mealy, fermented Leaven of the Bakers; this is made by kneading fresh, sweet, wheaten Meal, with Water into a soft Dough of a moderate Density, which is to be set aside in a warm Place, slightly covered; and then in an Hour it will begin to swell, open on all Sides, rise in Bladders, lose its Smell, Taste, and Tenacity, and become acid.

Sixthly, The Residuums of former fermented Liquors, which adhere to the Sides of the Casks, for these Casks remarkably promote the Fermentation of fresh Liquors put into them.

Seventhly, The Whites of Eggs, tho' not fermentable, yet by Accident become Helps to Fermentation, when they are beaten up and mixed with Liquors, so diluted, and thin, that they suffer the Air and Spirits, too readily to discharge themselves, and do not retain them long enough to change their fermentable into a fermented State. In this Case the Whites of Eggs inspissate the Fluid,

and enable it to retain sufficiently the Air and Spirits.

Eighthly, Alcalies by Accident, likewise assist Fermentation, when prudently mixed with vegetable Liquors too acid for Fermentation. And Acids do the same, when added to Fluids, which are hindered from fermenting, by any Tendency to Putrescence. These are not Ferments themselves, but remove the Impediments to Fermentation. Good Tartar, however, may in some Respects be esteemed a Ferment.

Ninthly, some austere Bodies, as Quinces, unripe Medlars, rough Cherries, and such like Substances, when added to Liquors too thin, weak, and watery to retain their volatile Spirits, have accidentally assisted Fermentation.

The Preparations of the first Class reduced to Malt, scarcely require the Assistance of Ferments, but are disposed spontaneously to ferment sufficiently, and sometimes too much. In Winter, however, an Addition of some Ferment, and of an artificial Heat is necessary to excite a proper Degree of Motion. An Ounce of Yeast, or Honey, or Sugar, is sufficient for twenty Pints of Liquor, or double that Quantity of Baker's Leaven, provided the Liquors are kept in a very warm Place.

Those of the second Class seldom require any Addition, unless the Weather is very cold; and then a little Yeast may be added to it, if the Fermentation proceeds too slowly.

Those of the third Class, in the Summer, and warm Weather especially, readily ferment spontaneously; in cold Weather, if the Fermentation is checked, it may be promoted by the Addition of a little Sugar or Honey.

Those of the fourth Class spontaneously ferment too violently, if the Weather is warm, and especially if the

Season has been favourable to their Maturation.

Those of the fifth Class require no additional Ferment, but rather serve as Ferments to other Substances that require it.

When Fermentables have been duly prepar'd, and diluted with Water, they are to be put into an oaken Cask well season'd with a Liquor of the same Kind, fermented in it before. Then let it stand in a Heat, betwixt sixty and seventy Degrees on *Fahrenheit's* Thermometer, and let the Bung-hole be left open, that the Air may have free Ingress and Egress; or it may be slightly cover'd with a Flannel, to prevent Dust and Insects from falling in; and upon this the Fermentation commences, and regularly proceeds.

Boerhaave, in Order to observe the Phænomena in Fermentation, took a large Glass Cucurbit, and plac'd it upright in a wooden Box, in such a Manner, as to be able to support an equal Heat, by supplying the Bottom of the Box with Fire; then he fill'd three Fourths of the Cucurbit, with a crude fermentable Matter, properly prepar'd for Fermentation, and remark'd the following Appearances :

First, then, the Mass which in the Beginning was at rest, and took up a certain Space in the Vessel, began insensibly to swell, and rarify, to be elevated and conceive an intense Motion thro' all its Parts, which discovers itself by the strange Gyration of the Liquor, upwards, downwards and side-ways, nor ceases, tho' the Force changes every Moment. In the mean Time, Bubbles appear to be generated in every Part of the Mass, which, with a strong Tendency, endeavour to ascend, sometimes bursting as they rise, or else at the Surface, with an hissing Noise. Hence the whole Matter, but especially the Surface, becomes frothy ;

and with a Noise like that of Ebullition, emits an acrid Spirit, which affects the Nostrils with its Acrimony, is somewhat acid, wonderfully elastic, incoercible, bursting by its immense Force almost all Vessels in which it is confin'd. Hence *Helmont*, in Order to distinguish it by a particular Name, call'd it *Gas Sylvestris*.

Secondly, Whilst Things proceed in this Manner, the thicker Part of the fermentable Mass, begins to be separated from the thinner, and is thrown up to the Top, where it is collected in a thick, spongy Crust, which accurately covers the Liquor underneath, and confines, and repels its more active Parts ; so, that they cannot easily exhale, before they have perform'd their proper Office. On this Occasion, it is highly entertaining, to observe the violent and constant Agitation, thro' all the most minute Parts of the Liquid, which lies under the incumbent tenacious Crust. Nor is it, perhaps, possible to conceive a greater Attrition, than that arising from the rapid Agitation of those Corpuscles among each other. Hence, the Crust being elevated, and separated by the repeated Explosions, a Vapour bursts out thro' the Clefts, with a considerable Noise, upon which, the Crust falling down, presently closes again, and confines as before, the active Principles, so, that they cannot too easily exhale, and be dissipated. The Formation, and Continuance of this Crust, tend above all Things to bring about a perfect Fermentation.

Thirdly, 'Tis also to be observ'd, that, whereas all the thick Part of the fermentable Matter, was at first, carried up, and collected at the Top, there are now some Parts at the Bottom of the Crust, which growing less rare, and being no longer supported by the Bubbles, which render'd them light, begin to descend thro' the liquid Part, are agitated upwards

upwards and downwards, form Bubbles about them, by whose Assistance they rise, then by their Explosion sink again, and when this has happen'd alternately, for a considerable Time, at last subside to the Bottom, and remain at rest. Then other Globules ast the same Part; and, when this has proceeded for some Time, it often happens, that the whole upper Crust becomes heavier and less rare, on Account of the Explosion of the Spirits, sinks down at once, and soon after rises again almost entire, and with such a Force, as is hardly credible. When the whole Crust is perfectly dissipated, and sunk to the Bottom, the Fermentation ceases, tho' the same Degree of Heat is still continu'd; a clear, thin, light Liquor swims at the Top, and the Feces subside to the Bottom.

Hence in every true Fermentation, the fermentable Matter is, at first, of an unequal Consistence, but afterwards separated into two Parts, the more liquid which is undermost, and the more solid Crust, which covers it. This Crust, so long as it keeps the upper Place, is called the *Flowers* of the fermentable Liquor or *Yeast*, and is the most convenient and serviceable of all Ferments. But in the second Stage of Fermentation, it is separated into three Parts, the *Flowers* at Top, the *Liquid* in the Middle, and a third Part, which begins to fall, and be collected at the Bottom, under the Title of the *Feces*, which, are the thicker and heavier Part, now quite exhausted of that Principle which caused the Fermentation. And lastly, in the third Stage, it is again divided into two Parts, the Upper, which is clear, fine, and thin, and call'd *Wine*; and the Lower, which is thick, and lies at the Bottom, named the *Lees*, or Mother of Wine.

But there is nothing more surprising, and more carefully to be observ'd, in this Affair of Fermentation, than that prodigious *Spiritus Sylvestris*, or incoercible Spirit, which rushes out with such a Force when the Fermentation is at the Height, nor is there any known Poison that is so subtle, swift, and fatal; for if a large Vessel full of the best fermented Must in the Height of Fermentation, should discharge this Spirit thro' a small Vent-hole in the upper Part, and the strongest Man should but once draw this Vapour into his Nostrils, he would drop down dead that very Moment; or if he drew it in but a little, he would be taken with an Apoplexy; if still less, he would be depriv'd of his Understanding, and be a meer Idiot the rest of his Life, or else become Paralytic; and hence, the like Misfortunes happen to those who are imprudently busy in close Wine-Vaults, where the Wines are fermenting in the Time of Vintage. For this Reason, those Places ought to be purified by Fires, and aired by setting the Windows open. From Sugar dissolv'd in Water, and its Froth first fermented, we have an Account of a Spirit produced, which being drawn into the Lungs in a small Quantity, in an Instant stopped all Respiration, exciting an intolerable Asthma.

Let Physicians, then, consider the Force of Liquor drank in the very Act of Fermentation, and how violent that Spirit may be, which in Summer is generated in the human Body, from a too free Use of Summer Fruits when very ripe, if by a convulsive Constriction of the Stomach, they are prevented from passing any farther, and by being kept in a warm Place, acquire and exert an extreme Elasticity and Acrimony. Hence in *Alcohol*, there still remains a great deal of this Poison, and therefore,

therefore, if the Vapour of it be taken into the Nose, in a great Quantity, and for a long Time, it causes the greatest Degree of Drunkenness, or a slight Apoplexy. If it be used too freely internally, it affects the Brain and Nerves particularly, and their Functions. In Chymistry, we are still at a Loss, from whence this Spirit arises; we know, indeed, it is the Production of an actual and present Fermentation, nor do we know that such a one is generated in any other Way; but we cannot conceive, how it causes Death without any Disease, or how it affects the Cerebrum, Cerebellum, or Nerves, without Matter, or without any visible Alteration, either in the Solids, or Fluids.

As soon as the Fermentation is over, it is proper to close the Vessel, and let the fermented Liquor rest awhile upon its Lees, for it will still consume much of them, and assimilate them to itself, and so be stronger, more spirituous, and much fitter for Distillation.

The Time necessary for completing a perfect Fermentation, can scarce be determined exactly, as depending upon the Place where the Vessel stands, the Season of the Year, the Heat, and Wind it is exposed to, and the Nature of the fermentable Matter itself. In *Africa*, the Liquor of the Palm Tree passes thro' this Operation, in the Space of a few Hours: In *Asia*, too, the Business is very soon over; but, in the northern Countries, it proceeds but very slowly. The hot Summer Season quickens, the Winter checks it. The South Wind promotes, the North Wind retards it. The expressed Juice of Grapes and Sugar ferment suddenly and violently, other Fermentables more slowly. It is easy, however, to know when a perfect Fermentation is at an End,

which is, when all the Phenomena mentioned, have appear'd in the Order described, and at last cease spontaneously; and then the Vessel must be immediately stopped, and the fermented Liquor kept upon its Lees, for otherwise, the Spirit generated by the Fermentation, would in a short Time exhale, and leave the Liquor vapid, and good for nothing; whereas, if the Liquor is kept quiet in a Vessel well stopped, it grows gradually finer, more subtle, and fuller of Spirit. Thus the fresh expressed Juice of Grapes may, by boiling, be inspissated without losing any of its Virtues; but after Fermentation, if it be only exposed to the cold Air, it is soon exhausted of all its Spirits.

The Circumstances necessary to a successful Fermentation, are principally these:

First, It is requisite that the fermenting Liquor should remain at rest, that the Crust which forms itself at the Top, may keep entire, for to be continually stirring, and mixing it with the Liquor underneath, prevents a perfect Fermentation.

Secondly, There must be a free Ingress and Egress of the common Air, which must, also, be intimately mixed with the fermentable Matter, by treading, kneading, or pressing; otherwise the Fermentation will not proceed.

Thirdly, A Degree of Heat, between Forty, and at most Eighty.

Fourthly, The Spring and Autumn in particular, are said to favour this Operation; and when those Vegetables are in Flower, from which the Wine was made, 'tis said, the Fermentation is subject to be reviv'd. Hence the Wine of Grapes is reputed to grow foul, and easily ferment again, when the Vine is in Blossom.

The Checks to Fermentation, by which

which it is either impeded after it is began, or entirely stopp'd, are as follow :

The acid Vapour of burning Sulphur long included, and in a considerable Quantity, with the Air which is in the Cask, above the fermenting Liquor ; for if a Vessel first thoroughly penetrated, and replete with this Vapour, receives the fermenting Liquor, and the upper empty Part be afterwards filled with the same Vapour, and carefully stop't, you will prevent any farther Fermentation, which, after some Time, may be reviv'd by proper Means, and restrain'd by the same Fumes. The same Effect follows, from mixing a large Quantity of a strong Acid with the fermenting Matter. The Acids of Alum, Nitre, Salt, Sulphur, and Vitriol, prevent Fermentation, but at the same Time spoil the Liquors.

Alcaline Salts, also, if they are mixed in great Quantities with fermenting Liquors, excite for the present, a very considerable Effervescence ; but that soon ceasing, leaves the Liquor incapable of farther Agitation, its Nature being so utterly destroy'd, that it can scarcely be afterwards rais'd to a Fermentation, but rather tends to Putrefaction. Hence it appears, that Alcalies are a greater Obstacle to Fermentation than Acids, the former destroying or suffocating all the Acid. Wherefore,

All Bodies entirely absorbent of Acids, if mixed with fermenting Liquors in a proper Quantity, after a short Struggle and Effervescence, put a Stop to this Operation. Chalk, Crabbs Eyes, Coral, Pearls, Oyter-shells, Iron, Lead, and Tin, have the same Effect.

Stopping the Vessel so closely, that nothing can pass in or out, provided the Vessel be so strong, as not to burst by the Force of the included Liquor, also, stops Fermentation. This is evident, by new Ale put

into very strong Bottles, where the Admission of Air converts the Fermentation, so long suffocated and prevented, into the most violent Effervescence, and discovers a prodigious collected Force. The same Thing happens also in Casks, for there is a constant Struggle and Renitency between the fermenting Body and its containing Vessel.

A great Degree of Cold destroys all Fermentation, for under thirty-six Degrees of Heat, it will hardly make any Progress. Nor is too much Heat a less Obstacle to it, which if it exceeds ninety Degrees, rather dissipates the active Principles of Fermentables, than assists and quickens them. Hence an Exhalation under a greater Degree of Heat, inspissates Fluids to a Degree of Density, unfit for Fermentation. Boiling has a much quicker Effect, so that the richest Juice of Grapes, which can hardly be kept from fermenting, will by quick Boiling loose all its Disposition to ferment, and be converted into a Mass that will rest for Years without Alteration.

The Separation of the elastic Air, by Means of the Air Pump, stops Fermentation, for during the Absence of the Air, the fermentative Motion entirely ceases.

Lastly, An extraordinary Condensation of the same Air, with the fermentable Matter, absolutely prevents both the Beginning and Progress of Fermentation.

Having taken a distinct View of the first Fermentation of vegetable Juices, by which a vinous Liquor is produc'd, that is intoxicating, and yields an inflammable Liquor by Distillation, let us now consider the second Fermentation, by which an acid Liquor is generated, call'd Vinegar, that extinguishes Fire, and is so far from inebriating, that it is a Preservative against, and a Remedy for, Drunkenness.

The Ferments by which an acetose

these Fermentations is most successfully promoted, are particularly these.

First, The acid Feces, or Lees of an acidish Wine; call'd the Mother of Wine.

Secondly, Feces of Vinegar collected in old Casks, especially such as are well saturated with very strong Vinegar.

Thirdly, Tartar of an acid Wine, reduc'd to Powder.

Fourthly, Vinegar itself, first well prepared, and brought to its greatest Degree of Acidity.

Fifthly, Old wooden Casks, which have been for a long Time full of the strongest Vinegar, and hence are thoroughly penetrated with its sharp Acid.

Sixthly, The frequent stirring up of the Lees in its own Wine.

Seventhly, The Stalks, Twigs, and Skins of Cherries, Currants, and Grapes, the Tendrels of Vines, and the like Parts of other acid, austere Vegetables.

Eighthly, The acid Rye leaven of the Bakers.

Ninthly, A Composition of all the Preceeding mix'd together, especially if there are some very warm Aromatics added to the Acids, for then the strongest Vinegars are produced.

Glauber, long ago, gave the whole History of the Generation of Vinegar with great Accuracy, an Account of which was afterwards publish'd in the *Philosophical Transactions*. The Purport of which, is as follows :

Two large oaken Vessels are prepar'd, in the Shape of common Casks; in each of these, at about the Distance of a Foot from the Bottom, as they stand upright, a wicker Grate is fix'd; upon these Grates is a moderate thick Stratum of fresh, green Tendrels of Vines, and over these such a Quantity of the Pedicles of Grapes, from which the Grapes have been stripped, as is suf-

ficient to fill the Vessel to within a Foot of the Top. When these two Vessels are thus prepar'd, the Wine, of which the Vinegar is to be made, is pour'd into both of them, but in such a Manner, that one of them is filled quite full, the other half-full, and then every Day alternately, the Vessel which was half-full, is filled out of the other, so that neither remains full above twenty-four Hours; after proceeding in this Manner for two or three Days, a Fermentation arises in the Wine, with a sensible Heat in the half-fill'd Vessel, and this increases gradually every Day. Mean Time the Motion and Heat are almost suffocated in the Cask which is quite full, so as nearly to cease in the Space of the twenty-four Hours, during which it remains full. Thus Fermentation and Heat are alternately excited and suffocated in the two oaken Vessels.

In this Manner the Operation is continued, till the Heat is extinguished, and there appears no more Motion, in the half-filled Vessel; and this is a Sign that the acetose Fermentation is compleated; the Vinegar, therefore, must be then put up in Casks well stopp'd.

The hotter the Room is where these Vessels, in which Vinegar is prepared, are placed, the sooner it will be made; in *France* it is compleated in Summer in about fifteen Days; but in cold Weather, and a cold Place, the Operation is more slow; but whenever the Season, or the Workhouse, is very hot, it is often necessary, to fill the half-filled Vessel, out of that which is full, every twelve Hours; for otherwise there arises such a Heat and Fermentation in the Vessel half-full, that the volatile Spirits of the Wine, not being yet sufficiently fixed, are dissipated by the Heat, and fly off before they can be properly entangled, and converted into the acid Spirit of Vinegar;

Vinegar; and hence the Liquor tho' it would be four, would, at the same time, be vapid, and in no Respect strong generous Vinegar. For this Reason, also, the Vessel which is half-full, is always accurately closed with a Cover of Oak, that the foaming Ebullition of the fermenting Liquor may be restrained and checked, and thus the repelled Spirits, may act longer and more forcibly, upon the austere Substances underneath, and by the Reaction of them, be better secured from Dissipation. But the full Vessel is not covered, but left quite open, that the Air may have free Access to the Liquor designed to be changed. This is the second Fermentation, which tends to the Production of Vinegar, and there terminates. Vinegar is erroneously by some esteemed a Liquor, produced after the Evaporation of the inflammable Spirits generated by the first Fermentation; for this would be vapid, and nothing like Vinegar. On the contrary, the more generous, and the more replete with Spirits Wine is, which is used for this Purpose, the better will the Vinegar be, and the weaker the Wine is, the less acid is the Vinegar prepared from it. For this Reason the strongest Malt Liquors, if they are treated in the same Manner, yield an exceeding good Vinegar, as do the richest *Spanish* Wines. In this Operation it is particularly remarkable, that this Conversion of Wine into Vinegar, is not brought about without the Generation of a considerable Heat, during the Fermentation. Whereas Must fermenting in the Time of Vintage scarcely generates any Heat: And Malt Liquor, notwithstanding the violent Motion which is excited whilst it works, does not grow warm; is Heat therefore always required for the Generation of an Acid? It is certain that Corn, and Milk, and Food prepar-

ed from these do not grow acid, without a Heat either of the Season, of artificial Fire, or that of the Body. And we find that a violent Fire converts Nitre, Sulphur, and Salt, which are not acid, into Spirits extremely acid. Hence, perhaps, upon Reflection, we shall find Reason to believe, that almost every Change that is brought about in Nature, requires a certain Degree of Heat.

In this Operation, another Circumstance occurs, which deserves our Consideration, which is, that whilst Wine is thus converted into Vinegar, this clear thin Liquor deposits an incredible Quantity of thick, pinguious, oily, and as it were soapy Feces, which hang about the Sides of the Vessel, the Vine-tendrils, and the Pedicles of the Grapes. Whence should this arise? In the Wine, there is not the least Sign of any such Thing, and in the austere Tendrils and Pedicles, one would expect to find nothing like a pinguious oily Substance; and it is in this Manner formed from the Wine, for if it is washed off, it will be generated again, in so much that it is necessary once a Year, to clear away all this gross unctuous Matter, otherwise when the Wine was put into the Vessels, it would not be chang'd into a thin sharp Vinegar, but to a thick corrupted pinguious Liquor, fit for no Use whatever.

But Care must be taken to clear the Pedicles, and Twigs from this pinguious Matter, which adheres to them by a sudden Affusion of Water upon them, which must be suffered to run thro' them, lest, if it should remain, it should deprive them of their acid Ferment, with which they are now impregnated. After this the Grates, Sides and Bottoms of the Vessels in which the Vinegar is made, are cleared with the same Caution, and as soon as ever the pinguious Impurities are removed, the Grates,

Grates, Twigs, and Stalks, are disposed of as before, and are then again fit for making Vinegar, till, by a long Use, the same oily Crust will be formed again, which evidently demonstrates, that the Wine actually throws out an Oil, whilst it is changed from its own proper Nature, to that of Vinegar. At the same time too, the acetific Ferment, remains in the Vessels, Grates and Stalks, and hence when these Vessels have been used a considerable Time, they acquire very strongly, the Power of converting Wine into Vinegar, and with the Grates and Stalks, &c. become as it were spongy Reservoirs of Vinegar.

It is farther to be remembered, that as *Alcohol*, prepared from very strong old Malt Liquor, can scarcely be distinguished from that drawn from the richest Wine, so here the same Malt Liquor, treated in the Manner explained, may be converted into Vinegar, as good, pure, and fit for any Use as can be made from the best Wine; nor is it easy to find any Difference betwixt them, except what is owing to the Bitters put into Malt Liquor, to make it keep, which give it a Colour and Taste, different from what it would have had, if prepared from Corn alone; in other respects they are entirely the same.

The Effect, therefore, of this second Fermentation, when completed, is the Production of good Vinegar. In order now to understand this the better, let us consider what Vinegar is. Vinegar is an acid, penetrating, sub-punguous, volatile, vegetable Liqueur, produced from Wine by a second Fermentation; the first Part of this which rises in Distillation, is truly acid, and by no Means inflammable, but extinguishes Fire and Flame, like Water; and by these remarkable Properties, Wine is distinguished from Vinegar.

The Promoters of this second Fermentation are:

First, A sufficient Degree of Heat.

Secondly, The free Access, and even Admixture of the Air.

Thirdly, Motion, Conquassation, and frequent stirring the Liqueur in the open Air.

Fourthly, The Addition of some very warm Aromatic during the Fermentation. The Impediments to this Fermentation are all those Things which retard the first Fermentation, except that stirring the Liqueur about here is of Service, whereas in the other it does Harm.

Upon reflecting on the Appearances in both the Fermentations necessary to the Generation of Vinegar, I think there is reason to believe that the Acid of Vinegar, is not a new Production, but that it rather lay concealed, and enveloped in the Oil of the vegetable Juice, till disengaged from it by two Fermentations, which are nothing more than continued Efforts of the extremely elastic Acid, assisted by a proper Degree of Heat, to disunite itself from the vegetable Oil, which disguises it, and detains it, thereby preventing it from flying off, and mixing with the Air, of which perhaps, it was originally a Denizon, and from whence it may be entertaining to trace it, till it disentangles itself from the vegetable Juices, and exhaling, leaves the remaining Fluid tasteless, and vapid, being only Water, with a small Portion of mucilaginous and unactive Oil.

There is an Acid perpetually floating in the Air. This Acid is so strongly attracted by alkaline Salts of all Kinds, that in Time they become so saturated therewith, as to be entirely neutral. Now alkaline Salts are the great Promoters of Fertility, insomuch that, unless the Earth is sufficiently saturated with them, no Vegetable of any Kind will grow in it,

it, because these Salts are necessary to the Formation of a saponaceous, neutral Menstruum, capable of dissolving Earth; otherwise Earth, which is incapable of Solution by Water alone, could not enter the Pores of the Roots, and contribute to the Formation of the solid Parts of Plants.

If we examine all the Substances in Nature, that are used to promote Fertility, we shall find they contain an alkaline Salt. Thus all the Parts or Excrements of Animals, contain analcaline Salt; and the same Kind of Salt is found in all Vegetables that have undergone Putrefaction. Thus Lime, also, contains an extremely volatile and penetrating alkaline Salt, of singular Efficacy in fertilizing barren Lands. Amongst Limes may be reckoned a Kind of *Sal Tetra*, to be discovered by its Effects in all Countries: For Earth, by the continual Action of the Sun upon it during Summer, is in some Measure calcined, and furnished with a Salt of the Nature of Lime. Hence the Advantages of a Summer Fallow, as the Farmers call it, which is only exposing the naked Earth to the Influence of the Sun. Hence, also, the great Fertility of Meadows from Inundations; for the Waters having in their Passage taken up and dissolved large Quantities of this *Sal Terra*, deposite them upon the Lands they overflow.

But this is no where so remarkable as in *Aegypt*, whose prodigious Fertility seems to depend entirely upon this Kind of alkaline Salt; for the Water of the *Nile* being gathered in the parched Mountains of *Aethiopia*, collects in its Passage this Salt, which it afterwards deposite on the Soil of *Aegypt*.

This Kind of Salt is, perhaps, that which the Inhabitants in all Ages have collected in great Quantities, under the Name of *Natron*, which

is not unlike the *Cineres Clavellati*, and may be used for the same Purposes. When these alkaline Salts are committed to the Earth, and consequently exposed to the Air, they attract the Acid floating therein, till they are saturated therewith, and become neutral. At the same Time they attract the Moisture, and with it the volatile Oil of Animals and Vegetables floating in the Air. These, then, mixed with the Oil of the Earth, being digested by the Heat of the Sun, form a penetrating, neutral Soap; which, when diluted by the Rains, becomes a Menstruum capable of dissolving Earth, or reducing it to Particles fine enough to enter the Pores of the Roots of Plants.

I call this a Soap, because it has all the Ingredients of Soap in its Composition, and answers the same End; that is, it dissolves Concretions of Earth, or, in other Words, Dirt. And I believe every Body has observed the Earth to foam and lather upon a hasty Shower of Rain. The Ingredients of Soap, are an alkaline Salt, and Oil. Now, all Oils contain an Acid, and this Acid neutralizes the alkaline Salt, as it mixes with it in the Formation of the Soap. It is, perhaps, on Account of this Acid, that Oils flame, for Acids, tho' not readily inflammable, yet flame with the utmost Violence, and greatest Degree of Explosion, when once set on Fire, and I do not recollect any Body in Nature that will flame, that has not an Acid in it. Turpentine, which are vegetable Oils, and contain a great Quantity of Acid, are remarkable for the Violence of the Flame they emit.

From this *Sapo Terra*, or Soap of the Earth, is made that neutral Salt which we call Nitre, perhaps the greatest Dissolvent in Nature, and for that Reason a Medicine of the greatest
Impor-

Importance in the Practice of Physic. It must be observed here, for the better understanding and Confirmation of what I am going to say, that the Acid of the Air, which enters the Composition of common Nitre, is not lost or destroyed, but only disguised and concealed under the Mask of the alkaline Salt, and Oil, with which it is united, and from which it may again be separated, as it actually is in making Spirit of Nitre.

This saponaceous Menstruum, then, together with the dissolved Earth, is conveyed into the Pores of the Roots of Plants, where a Part of the Earth and Salt is employed in the Formation of the Solids, and a Part of the Oil serves as a Cement for joining the Particles of Earth together, which otherwise would not cohere, but fall from each other like the Adhes of Vegetables, which are nothing but Earth and Salts, deprived of their cementing Oil, by Fire. Mean time the Juices, deprived of Part of their Earth, Salt, and Oil, are somewhat acid; that is, the Acid in some Degree disengaged from the enveloping Oil, neutralizing Salts, and austere Earth, has Liberty to act and affect the Organs of Taste. But as the Plant approaches to Maturity, less of the Oil and Earth received by the Root is employed in Accretion. They mix, therefore, with the Juices, and contribute by Degrees to their Neutralization, which is farther promoted by the Heat of the Sun, which digests them together, and mixes with them itself; for Heat is a Body, as has been proved by many Experiments; and according to its different Degrees, has the Power of neutralizing Acids, or expelling them from the Substances to which they adhered; but I do not know that it has been proved by any Experiment, that it can utterly destroy them.

It must, also, be remembered that Vegetables imbibe the Air, and no Doubt the Acid thereof. And indeed this Kind of Respiration is not less necessary to Vegetables, than to Animals; for without an open Inter-course with the Air, no Plant can live, but very soon withers away and dies. If we farther consider, that this Sort of Respiration is performed by Means of the Leaves, and that in most Plants the Leaves by Degrees decay and wither, as the Fruit approaches to Maturity, we may perhaps, find Reason to believe, that the Juices of Vegetables receive an additional Acid by Respiration, which ceases by Degrees, when the Acid is no longer of Use, and when the Neutralization of the Juices is necessary to the Maturation of the Fruits.

And this will be farther confirmed by most of these Vegetables, that produce a Fruit very acid, when full ripe, as the Lemon, Orange, Citron, and others of the same Kind, which do not loose their Leaves as the Fruit ripens. Upon the different Combinations of the acid, alkaline, Salts, Oils, Water, and Fire, depend the different Tastes of Vegetables. Hence, also, some Plants are salutary and medicinal, whilst others are deleterious and fatal, to Animals that eat them. How far the Acid may be concerned in rendering them poisonous, I cannot determine; but it is well known that Acids, when naked, are the greatest Poisons known in Nature; tho', when properly combined with Things of a different Nature, they are not only salutary, but endued with excellent medicinal Virtues.

The Example of the Vine may serve for an Illustration of what I have advanced, whose Juices in the Spring are much inclinable to Acidity, whilst the solid Parts, that is the Tendrels and Branches, increas-

sur.

surprisingly fast. The Juices of the Fruit, that is, the Grape, are also very acid, till arrived at their full Growth, and neutralized by the Accession of oily and alkaline Particles, and the Admixture of Heat or Fire, a great deal of which last is necessary to bring them to Maturity.

When these Juices are neutralized, that is full ripe, they are sweet, or in other Words, the Acid is enveloped in Oil, and a Portion of Earth and Salts, and mixed with Particles of Fire; for an Acid thus modified seems necessary to the Formation of a sweet Taste, as is evident in Sugar and Honey.

Thus Must and Wort are sweet, which put in a proper Vessel, and set in a sufficient Degree of Heat, begin to ferment; that is, the Acid which is extremely elastic, begins to expand and disengage itself from the enveloping Oil. Mean time a Part of the Acid flies off with so prodigious a Force that no Vessel is strong enough to confine it. This is what *Helmont* called the *Gas Sylvestris*, or incoercible Spirit, which is the most sudden and deleterious Poison known in Nature, and to a Portion of this remaining in the fermented Liquors, the intoxicating Faculty of such Liquors is indisputably owing.

This *Gas Sylvestris* I call Acid, because it has an acid Smell, and because its expansive Force is greater than that of any known Body in Nature, scarcely excepting the Acid of Nitre, to which it seems nearly related.

Mean time the more gross Particles of the Oil are separated and rise to the Top of the fermenting Liquor in a Froth, where they condense by Degrees and become at last heavier than the Liquor, when they sink to the Bottom, and remain there under the Name of Lees, or Mother of Wine: When this

Fermentation is compleated, the Liquor changes its sweet Taste, for one somewhat inclined to Acidity, and the finer and lighter Parts of the Liquor, separated from the heavier by Distillation, will take Fire and flame, and therefore must be an Oil attenuated by Fermentation, and containing an Acid.

During the second Fermentation, the more gross Particles which entered the Composition of the Oil, and enveloped the Acid, are separated from the Fluid, and deposited on the Sides and Bottom of the containing Vessels; and then the naked Acid is at Liberty to act, and affect the Organs of Taste with that Sensation which we call Sour; but if the second Fermentation is carried on a little too far, the Acid making its Escape, mixes with the Air, from whence it came, and leaves the remaining Liquor a tasteless vapid Mass.

What *Galen* observes with regard to Vinegar makes very much for what I have advanced; this Author tells us, that Vinegar in its penetrating Quality resembles the *Northern Air*. Now *Hoffman* informs us, that those who are concerned in the making Nitre observe, that the northern and easterly Winds favour the Production of Nitre, that is, bring the Acid which fixes on the Earth impregnated with alkaline Salts, and render it nitrous.

'Tis probable a Portion of this Acid, which, uniting with the grosser Particles of the Oil, fixes to the Sides and Bottoms of Casks, and forms Tartar. Hence that incoercible Spirit or Gas, which rises from Tartar in Distillation, that either perspires thro' the Lute, or bursts the Vessel.

If it should be mentioned as an Objection to what I have said, that the Spirit of Wine is lighter than

Water, and rises first in Distillation, but that the Acid of Vinegar is more fixed and rises after the Water, it would not much embarrass the Affair; for when the Particles of the Acid are divided minutely, and kept from joining by the Tenacity of the Oil, they must necessarily be affected by a less Degree of

Heat, than when their Gravity is increased by their Union, which happens as soon as they are in some Measure released from their Confinement; and then their Cohesion must be considerable, for Acids are of all Fluids the most ponderous, and consequently very solid.

C H A P. XVIII.

Of FILTRATION.

FILTRATION is the passing any Fluid thro' a Strainer, or Filtre, in order to separate from it any gross Particles it contains, and render it limpid. To filtrate Fluids of any Kind, Chymists and Apothecaries fold a Piece of bibulous or coarse Paper, in such a Manner as to fit a Funnel, the small End of which they place in the Mouth of the Vessel intended for the Reception of the filtrated Li-

quor. Then they pour the Liquor into the Paper, permitting it to drop gradually thro' it, and taking Care not to put in too much at a Time, for fear of bursting the Paper. Filtration may be, also, performed by Means of a conical, woolen or linen Bag, commonly called *Hippocrates's Sleeve*. But we must be directed in our Choice of one or other of these, by the particular Nature of the Fluid to be filtrated.

C H A P. XIX.

Of the Fixity and Solidity of BODIES.

FIXITY is opposed to Volatility, and Solidity to Fluidity; for as those Substances are called volatile, which easily and with a gentle Heat fly off in the Air, so fixed Substances are such as remain in the strongest Fire or are difficultly dissipated by Heat.

Those Bodies are called fluid, which consist of fine subtile Parts, agitated with a rapid intestine Mo-

tion, and having a large Quantity of etherial Matter intermixed with them.

Firm and solid Bodies are such as consist of larger and grosser Parts, so connected with each other, as not to move separately, but in the common Mass. Bodies are fixed in different Degrees and Respects; as, First, Those which are distilled with Difficulty, as the Oils of Vitriol and Salts:

Salts. Secondly, Those which remain fixed in the Fire, without any considerable Decrease, as the Calxes of Lead and Tin, Ceruſs of Antimony, the Anti-hecticum Poterii, fixed Salts, Earths and Stones. Thirdly, Glaſſes are ſaid to be of all other Subſtances the moſt fixed, ſince they ſuſtain the higheſt Degree of Fire, and loſe nothing of their Subſtance. Hence, the moſt penetrating ſolar Fire either diſſipates or vitrifies all Subſtance except Glaſs, which alone can remain in it.

It is obſervable that ſome Bodies naturally volatile, acquire the greateſt Degree of Fixity by an Admixture of other particular Subſtances. Thus Sulphur, which when kindled and retained in the Fire, totally flies off, by an Addition of fixed vegetable Salts, becomes capable of ſuſtaining the Fire, as we ſee in the Liver of Sulphur. Sulphur alſo mixed with Silver, Iron or Copper, and melted over the the Fire, obſtinately adheres to theſe Metals, and cannot be ſeparated from them by any Force of Fire. The moſt volatile Spirit of Sulphur ſaturated with fixed Salt of Tartar, conſtitutes a Salt, which remains highly fixed in the Fire.

Thus, alſo, Spirit of Vitriol, or of Sulphur, frequently abſtracted from Quick-ſilver, produces a Coagulum which is not eaſily diſſipated by the Fire, and is called coagulated Mercury.

Sulphur, Sal-ammoniac, and Mercury, are highly moveable Subſtances, and eaſily fly off in the Air; but when duely mixed with each other and ſublimed, they leave a reddiſh brown Maſs, which reſiſts the moſt intense Fire, is incapable of being ſublimed farther, and is called fixed Cinabar.

Spirit of Salt eaſily flies off into the Air, but when mixed with quick Lime, it is ſo fixed as to ſuſtain the

moſt violent Fuſion; for by this Means it is transformed into a fixed Sal-ammoniac.

Spirit of Salt mixed with Chalk, and diſtilled with it, ſtill remains in the Chalk, and produces a fixed cauſtic Salt of the alkaline Kind. Tho' Spirit of Nitre is highly volatile, yet when mixed with any fixed alkaline Salt, it is fixed and becomes a regenerated Nitre, which when diſſolved in Vinegar, is not diſſipated in the Air by the moſt intense Heat.

It is ſurpriſing, that Coals prepared of Vegetables, if treated with the higheſt Degree of Fire, in a cloſe Veſſel, cannot be burnt to Aſhes, nor a certain earthy Subſtance be ſeparated from them; whereas if the Air has free Access to them, their earthy Portion is ſoon diſſipated and flies off. Lead is by a violent Fire eaſily reſolved into Smoke, but by the Addition of Flints it is converted into a yellow Glaſs, called the Glaſs of Lead, which remains fixed in the Fire, and contributes much to facilitate the Fuſion of Metals and Minerals.

Antimony, together with its Sulphur and Regulus, as alſo Mercury, when calcined with Earths, burnt Harts-horn, or other Aſhes of Animals, fixed Salts, or quick Lime, have ſome of their Parts ſo fixed as to elude the Force of the greateſt Fire. The Fixity of Bodies principally depends on ſuch a peculiar Connection, Implication, and Adheſion of their conſtituent Corpuscles, that the Motion of the Fire and Air may no longer have any Influence upon them. The Fixity of Bodies, alſo, depends upon the Diſſipation of the fluid ethereal Matter; for the more of a volatile Matter Subſtances contain, the more volatile they are.

C H A P. XX.

Of FLUIDITY and SOLIDITY.

ALL Bodies are either solid or fluid, or compounded of these two. The principal Fluids are Air, Water, and the subtile Æther, with which last we are very little acquainted. The universal Solid is the Earth, but every Fluid is not moist, as Mercury and Air; tho' all Moisture is properly fluid.

Fluid Bodies are not continuous, but contiguous, and consist of small moveable Particles actually separated; some of which may be moved out of a Place, whilst the others remain in their former Situation.

To constitute a Fluid it is requisite; First, That the Particles be highly minute, and divided from each other. Secondly, That they be of a globular Figure, and have a smooth Surface; and, Thirdly, That they all have an equal moving Force, whereby they tend downwards if the Fluids are homogeneous; so that Fluids are always disposed parallel to the Horizon, and constitute a Kind of natural Ballance.

The Properties of Fluids are, that they may be compressed and dilated. Delatation is no more than a Rarefaction, and an Enlargement of the Pores, or an Expansion of the Fluid to a larger Space. The finer and more thin a Fluid is, the less it is capable of Rarefaction or Expansion, according to *Sthal*. Compression is an Angustation of the Pores, and Reduction of the Parts to a smaller Space. And, in Compression, the highly subtile Matter is expressed from the Pores, but in Rarefaction it enters them. All Fluids may, therefore,

be either condensed or subtilized, by the different Admixture of a subtile Matter.

Tho' the Parts of Fluids have perpetually a Kind of *Nifus* towards the Center of the Earth, and are consequently possess'd of a gravitative Motion, yet every Part is also conveyed round its own Center or Axis, which is that Motion, which in a great Measure constitutes the Nature of Fluidity, and the greater the Admixture of the ætherial Matter is, and the more subtile the fluid Particles are, the greater are the intestine Motion, and Fluidity.

The Parts of Fluids yield in different Directions to any external Impulse. They have, also, an elastic Motion, by which they restore themselves to their former State, when the compressing Force is removed.

Solid and hard Bodies are such as consist of gross Parts, not actually divided, but cohering with each other by their Ramifications. Whence if one Part is removed from its Place, all the others are moved at the same Time.

But Hardness does not consist in this, that the hard Particles remain at rest by each other, as *Des Cartes* imagined; for the Particles of Sand remain at rest by each other, tho' they do not constitute one continued hard Body. But what is principally requisite to Hardness is, that the Particles should not be regular and smooth, but so surprisngly angular and ramified, that they on Account of a Sort of concatenated Structure, cannot be divided without Difficulty.

Fluid

Fluid Bodies are more active than those of the solid Kind, which are of a more passive Nature. Fluids, as they are disposed to an intestine Motion, and fit for undergoing all Kinds of Motion, induce Changes in Solids, and become most apt to alter their Texture, as is obvious in Air, Fire, and Water. When the Parts of Fluids are agitated round their own Axis or Center, they easily divide Solids into their most minute Parts, which becoming specifically lighter than the Fluid itself, are received into its Pores, and constitute one seemingly homogeneous Liquor. The Solution or Fluidity of solid Bodies is obtained by Fluids, when their Parts are in an intestine Motion, and at the same Time, by their Gravity and Elasticity penetrate into the most minute Interstices of the Solids, from which they expel the etherial Fluid, divide the Parts from each other, and at last receive them into their Pores. Hence in every Solution Bubbles rise, and Heat is often produced.

The smaller Parts a Body is divided into, the more its Surface is enlarged; whence the smaller the Particles of Bodies are, the more easily they ascend, and are sustained in the Pores of Fluids, on Account of their greater Surface.

A certain Proportion between the Solvent and Solvend is always requisite. Thus one Ounce of Camphire requires at least two Ounces of a Menstruum. Thus, also, a certain Quantity of *Aqua-Fortis* only dissolves a certain Portion of Silver; and a certain Quantity of Water, a certain Portion of Salts.

When in a Fluid there is every where an equal Pressure and Resistance, and when this Fluid is every where equally acted on by another heterogeneous Fluid, it easily acquires a round Figure, as is observed of Mercury.

The Hardness or Solidity of Bodies, arises from the Dissipation of the Fluid, or the Expulsion of the etherial Matter from their Pores. Hence a Reason may be easily assigned, why, when Salts are dissolved in Water, and the Humidity dissipated by Heat, they again acquire a solid Form.

As Heat rarifies the Pores, so Cold renders Bodies more firm and hard, by constricting their Pores, as is observable in Water converted into Ice. Oils, especially of the expressed Kind, and such as abound with volatile Salts, as the Oils of Anise, Mint, and Caraway, as also all aqueous Liquors, easily acquire a solid Form in a cold Air. Hence the Reason is obvious, why the Precipitations of Salt, or of resinous Substances, from their Menstruums, are most easily performed in the Cold; and why Gums, such as Opium, Bellium, and Aloes are easily reduced to a Powder in Winter, but with Difficulty in Summer. Rigid, acid, and angular Parts, easily induce a Coagulum in thick Fluids; thus the White of an Egg is coagulated by Alum; Milk and Blood by the acid Spirit of Salt, and by a Solution of Sublimate, because Fluidity consists in the spherical Figure of the Parts, and their Division by an intestine Motion: But rigid, angular Particles being unfit for Motion and heavy, not only stop this intestine Motion, but join themselves with oleous and mucilaginous Substances, whence happens a Precipitation of the thick from the liquid Parts, and consequently a Coagulation.

The intestine Motion in thick Fluids is augmented by Concoction; or by the Addition of fixed or volatile Alkalies, or of aqueous Liquors, they become more fluid. Thus the Blood becomes the more fluid and frothy, the more it is shaken.

C H A P. XXI.

Of FUSION and LIQUIFACTION.

FUSION is the Reduction of solid Bodies into a State of Fluidity, by Means of Fire.

Solid Bodies whose Parts cohere, are at rest, and, as it were, interwoven with each other, become fluid, by Means of an igneous Motion, which is the most rapid, and violent Agitation of the highly moveable, etherial Matter, procuring an intestine Motion to the solid Parts, in which the very Nature of Fluidity consists. But when these igneous Particles fly off, or when the igneous Motion ceases, the intestine Motion of fluid Bodies, and consequently their Fluidity, is destroy'd, so that they acquire their former Solidity.

As Cold renders Bodies firm and consistent, by hindering their intestine Motion, and making their Parts approach to the Center, so Heat or Fire, by relaxing their Pores, producing an intestine Motion of their Parts, and propelling them from the Center to the Circumference, procures the Fluidity or Liquification of Bodies. Among solid Bodies some are more, and some less dispos'd to become fluid; for such Substances as consist only of a simple and unactive Earth, destitute of all Salt, Sulphur, and aqueous Principles, are either fus'd with Difficulty, or absolutely incapable of such a Change. But the more any Substance contains of a saline, sulphureous, or mercurial Earth, the more easily they are fus'd and liquified. All Stones calcin'd by the most Degree of Fire, so as to be

reduc'd to a Calx, as quick Lime, calcin'd Coral, calcin'd Shells, calcin'd Flints, Emeralds, and Jaccynths, cannot be rendered fluid by the most violent Degree of Fire, even that of the solar Kind collected by Glasses not excepted.

The solid Parts of Animals, such as Bones and Shells of Eggs reduc'd to a Calx, can be fus'd by no Degree of Fire, except that of the solar concentrated Kind, obtain'd by a large convex Glass, which with Difficulty produces the design'd Effect.

All the Species of Talc, Amiantuses, Muscovy Glass, Clays, Boles, and sandy Earths, because they have in their Composition a subtle, saline and etherial Principle, may be fus'd or vitrified, but only by a solar, or most intense Degree of Fire.

Among Metals, those fus'd with the greatest Difficulty are: First, Iron: Secondly, Copper: Thirdly, Gold: Fourthly, Silver: Fifthly, Lead: And Sixthly, Tin.

Calcin'd metallic Substances, as also, metallic Ores abounding with a sulphureous Acid, are not fus'd without great Difficulty; but they fly off by the Application of the most intense solar Heat.

The Fusion of solid Bodies is surprisngly promoted by the Addition of Salts, or Sulphurs; for which Reason, all Earths, Stones and Calxes, may be vitrified by Means of alkaline or neutral Salts.

Some Metals not to be fus'd without Difficulty, such as Iron, Gold, and

and Copper, are easily melted by the Addition of alkaline Salts, or such as contain a sulphureous vegetable Earth, as Salt of Tartar, Pot-Ash, and the black Flux Powder.

Iron Ores are fus'd by the Addition of quick Lime, and Charcoal, which is of great Efficacy both in the Calcination, and Fusion of metallic Ores, because it absorbs the acid, sulphureous, and vitriolic Particles, which prevent their Fusion or Fluidity.

All metallic and mineral Substances, that have been subjected to the Action of acid, or sulphureous Spirits, are not without Difficulty reduc'd to Metals; but when Charcoal and Nitre are added, the desired Effect is speedily produced, because the alkaline Earth of the Coal absorbs the sulphureous Acid, which is at the same Time kindled by the Nitre, and with it carried off into the Air.

'Tis somewhat curious, that mineral Sulphur disposes some Metals, not render'd fluid without Difficulty, to an easy Fusion; and in procuring to others easily fus'd, a great Resistance to the Influence of the Fire. Thus Sulphur added to Silver, or Iron, considerably promotes their Fusion; for an ignited Bar of Iron

melts into Drops, upon the Application of mineral Sulphur to it; whereas Sulphur mix'd with Lead or Tin, so destroys their Disposition to Fluidity, that the most intense Fire is requisite to their Fusion.

All metallic Ores which contain a large Quantity of Sulphur, ought to be previously calcin'd in a gentle Fire, before their Fusion is attempted; for by this Means, their Fusion is render'd much more easy than it would otherwise have been.

Pinguious Substances united with alkaline Salts, and all Sorts of Soaps, dispose Metals, metallic Ores, and Calxes to an easy Fusion; partly because they unite with the Sulphur, and partly because they consume and temperate the arsenical, rigid Acids, which hinder Fluidity. Fusory Fires differ in this, First, That the solar Fire fuses in a short Time, whereas a Coal Fire requires a longer Time. And Secondly, because by the solar Fire, all Metals reduc'd to Calxes, Minerals, or earthy Substances, which have a Sulphur, or a Salt intimately mix'd with them, are, after Liquifaction, render'd volatile, and carried off into the Air, which by no Means happens with a Coal Fire.

CHAP. XXII.

Of INCORPORATION.

INCORPORATION consists in the Mixture of certain Substances that will not spontaneously unite together. The Incorporation of Metals, and dry fusible Substances, is brought about by Fusion, and sometimes by Amalgamation. Liquids are sometimes incorporated

by Agitation, Digestion, or Circulation; Liquids and Solids, by Solution. But what is usually meant by this Term is, the Union of two Liquids, of themselves incapable of Mixture, by Means of a third Substance added to them. Thus Syrups and Oils will not spontaneously unite;

nite ; but if a due Portion of Sugar, Salt, or any Thing else capable of destroying their Viscidity, be first rubb'd with the Syrup, and the Oil be then gradually dropp'd into the Syrup, they will then unite, and form a Substance which is call'd an *Eclegma*, or *Linctus*, of a thicker Consistence, than either the Oil or Syrup separately. Thus, also, Balsams and Turpentine, which alone will not

mix with an aqueous Liquor, are brought to unite with it, if the Balsam or Turpentine, is previously mix'd with the Yolk of an Egg. Tho' I am far from thinking, that this Treatment, in either Instance, imparts any additional Virtue to the Medicine. Other Methods of Incorporation are taken Notice of under the Article of Menstruums.

CHAP. XXIII.

Of PRECIPITATION.

PRECIPITATION is a Dejection of the Particles of a solid Body, from the Pores of a fluid, so as to make them subside to the Bottom. That which causes the Precipitation, is call'd, the *Precipitant* ; whereas, that which falls to the Bottom, is call'd the *Precipitate*, or Magistery.

There are various Causes of this Dejection, from the Pores of a Fluid. The first of these Causes is, that the Menstruum in which a solid Body is dissolv'd, more readily lays hold of the Precipitant, than the dissolv'd Body ; so that whilst the Solvent endeavours to dissolve the Precipitant, the Particles lodg'd in the Pores of the Menstruum must necessarily be precipitated thence, because two Bodies cannot possibly exist in the same Place, at the same Time. Thus common Salt, or a Solution thereof, precipitates Silver, Mercury, or Iron, dissolv'd in Aqua Fortis, or Spirit of Vitriol. And, indeed, whatever is dissolv'd in Spirit of Vitriol, may be precipitated by the Addition of common Salt. Iron precipitates Copper from Spirit of Nitre, or from

any acid Menstruum, because Acids more readily dissolve Iron than Copper.

Silver dissolv'd in Spirit of Nitre, or Aqua Fortis, is precipitated by the Addition of Copper, because the Spirit of Nitre more readily dissolves Copper, than Silver, which must, for that Reason, necessarily be precipitated. Mercury dissolv'd in Aqua Fortis, is precipitated by Zinc, or Bismuth ; because, the Bismuth is much more easily dissolv'd in the Aqua Fortis than the Mercury.

All Metals dissolv'd in acid, corrosive Menstruums, are precipitated by the Addition of alkaline Bodies, and alkaline Salts, because Acids quickly unite with alkaline Substances.

Another Cause of Precipitation is, when the solvent Liquor intimately mixes with the added precipitating Liquor, so as to produce a Third, which is no longer fit to retain the Body before dissolv'd in its Pores. Thus all resinous and sulphureous Substances, distill'd Oils, and resinous Gums, dissolv'd in rectified Spirit of Wine, are precipitated by the

the Affusion of common Water, by which Means the Mixture becomes not only turbid, but also whitish, if the Resin is pure: By this Means Resins are prepar'd, whilst the Spirit of Wine extracts the resinous Parts, which afterwards being precipitated, coalesce and constitute Resins. Thus the Resins of Storax, Aloes Wood, Ladanum, Guaiacum, Jalap, and Scammony, are generally prepar'd in the Shops.

The Reason of this Precipitation is, because the best rectified Spirit of Wine, intimately and quickly mixes itself with the aqueous Particles, which are very congruous to its Pores, so that the resinous Parts lodg'd in the Pores of the rectified Spirit of Wine, are precipitated thence.

An Example of this Kind of Precipitation, we have in the Precipitation of Milk, Blood, and the gelatinous and glutinous Parts of Animals, by Means of highly rectified Spirit of Wine, because the rectified Spirit of Wine readily unites with the Water, which is, also, generally the Vehicle of the Spirit, so that the gross and solid Parts lodg'd in the Pores of the Fluid, must necessarily be precipitated to the Bottom, where uniting, they often form a firm and solid Mass.

Volatile Salts dissolv'd in Phlegm to the Point of Saturation, or all volatile urinous Spirits prepar'd with Water, and well saturated, are precipitated by the Addition of highly rectified Spirit of Wine.

Another Example of this Species of Precipitation is, when Spirit of Nitre, or *Aqua Fortis*, are pour'd upon Butter of Antimony; for the Spirit of Salt in the Butter of Antimony, intimately unites with the Spirit of Nitre. Hence a Precipitation, and some Time after a violent Effervescence is produc'd; because from these Spirits is generated

an *Aqua Regia*, which violently dissolves the antimonial Part. Thus, also, Silver dissolv'd in Spirit of Nitre, is precipitated by the Addition of Spirit of Salt; and Silver dissolv'd in *Aqua Fortis*; is precipitated by Spirit of Vitriol; for these Spirits mix with each other, and afterwards produce an incongruous *Menstruum* for Silver.

A third Cause of Precipitation is, when the *Precipitant* imparts an additional Weight to the Corpuscles dissolv'd in the *Menstruum*, so that they can be no longer sustain'd in the Fluid. Thus the Solutions of Galls, Essences of Aloes Wood, Tormentil, Peruvian Bark, Japan Earth, and Infusions of Orange and Pomegranate Peel, precipitate Solutions of Vitriol, and all Tinctures of Iron, in which they produce an inky Colour. All aqueous Gums, as Gum Tragacanth, Gum Arabic, and Cherry Tree Gum, are precipitated by Acids, because Acids joyn'd to the gummy Parts, coagulate the Particles, and thus produce a Precipitation.

All Acids precipitate Milk, Blood, Serum, and Emulsions of various Kinds; because the Particles of Acids joyn'd with the oleous Parts of these Substances, not only increase their Weight, but also procure a closer and stronger Union between them; whence arise a Coagulation and Precipitation.

All astringent Liquids, consisting of an Acid, and an earthy Principle, for the same Reason coagulate Milk, Serum, and Blood. On this depends the Operation of Styptics, and such Medicines as stop violent Hemorrhages. A Solution of Alum precipitates almost all vegetable Juices; by which Means, the Magisteries of Herbs are obtained; when, for Instance, this Solution of Alum is pour'd upon their Juices; for the heavy and earthy Particles of
the

the Alum, adhering to the alkaline and gummy Parts of the Vegetables, render them heavier; in Consequence of which they subside, and quit the Pores of the Menstruum.

Ising-glass dissolv'd in Water clarifies turbid Wine, and the same Effect is produc'd by Litharge. The Reason is, that when the sulphureous and earthy Particles lodg'd in the Pores of the Wine, and preventing its Clearness, intimately unite with the gummy Parts of the Ising-glass, they have their Weight by this Means increas'd, and fall to the Bottom.

Spanish Wine may be clarified and rendered pellucid, by an Addition of Milk; for when the spirituous Particles mix with the aqueous Parts of the Milk, the caseous and earthy Parts fall to the Bottom, and carry with them the thick and viscid Parts of the Wine.

Sugar dissolv'd in Water precipitates Ink, because a Solution of Sugar, as being heavy, tends to the Bottom, and carries with it the Chalybeate and earthy Particles lodg'd in the Ink.

The heaviest Mercury added to Solutions of Metals, precipitates those Metals, because the metallic Particles amalgamate themselves with the Mercury, and are with it carried to the Bottom.

A fourth Cause of Precipitation is, the Narrowness of the Pores of the Menstruum, for it is sufficiently known, that Cold precipitates dissolv'd Substances; because the cold Air operates partly by diminishing the Pores of the Fluid, partly by preventing the Motion of Fluidity, and partly by moving the Particles from the Circumference to the Center, by which Means the dissolved Corpuscles are united and subside. This is the Reason why various Kinds of Salts dissolved in Water to a sufficient Degree of Satur-

tion, when exposed to the cold Air, are precipitated and crystallized, whilst the plain Filaments of the Salts are firmly joined together, and constitute a firm crystalliform Substance.

It is remarkable, that various Tinctures, Solutions, and Essences, as the Tinctures of Sulphur, *Zwelfer's* Tincture of Mars, a Solution of the Vitriol of Mars, and the Essences of Myrrh, and Gum-ammniac, are rendered turbid, and precipitated in the Winter Time, or when the Weather is very cold.

All alkaline Substances, together with all Metals and Minerals, dissolved in an acid Menstruum, are precipitated by alkaline Salts; as for Instance, by Oil of *Tartar per Deliquium*, a Solution of Pot-ash, Lime-Water, the Liquor of fixed Nitre, and by all the fixed Salts of Vegetables; for the *Alkali* unites with the Acid, and both together become a neutral Salt.

All Substances dissolved in acid Menstruums are precipitated by volatile urinous Salts and Spirits, as the Spirit of Sal-ammoniac, and the volatile Salts of Harts-horn, or of Urine.

A Solution of Mercury precipitated with Oil of *Tartar per Deliquium*, yields a reddish Magistery, or *Turpeth Mineral*. But when it is precipitated with Spirit of *Sal-ammoniac*, a Magistery as white as Milk is produced.

Hence 'tis obvious, that volatile Salts added to precipitated Substances induce a different Quality and Alteration, than when they are precipitated by fixed Salts.

All Kinds of Sulphurs, together with resinous and oleous Bodies, dissolved in alkaline Menstruums, whether volatile or fixed, are precipitated by all Kinds of Acids, as Vinegar, Solution of Tartar, the Spirits of Salt, Vitriol, and Alum.

Sul-

Sulphureous Bodies dissolved in lixivial Menstruums, are precipitated by those neutral Salts, in which an Acid predominates; by the Solutions, for Instance, of Nitre, Lead, Coral, Sal-ammoniac, and Vitriol, but not by common Salt, vitriolated Tartar, and the Arcanum duplicatum; because in these the Acid is strictly united with the Alkali, but more loosely in the other earthy Bodies.

Alcaline or metallic Substances precipitated, are called Magisteries, especially if they are of a whitish Colour. But it is to be observed, that Magisteries are always heavier than the Bodies themselves before the Solution, which sufficiently evinces, that the Menstruum and *Precipitant* intimately add some Particles to the Substances precipitated; for which reason Magisteries are not so much esteemed in Medicine, as the Substances themselves, prepared, and reduced to a Powder.

All alkaline Substances and fixed Salts, without Solution dissolve mineral Sulphur, and by this Means precipitate the Metal detained by it.

On this depends the Method of obtaining the *Regulus* from Antimony, of separating Metals from their Ores, of reducing Calxes and Magisteries to their former Substances, and of reviving Mercury coagulated under various Forms.

All the Calxes of Minerals prepared with an Acid, or with Fire, may be reduced to the former Metals by Means of Nitre and Charcoal, or fixed Nitre. In this Manner *Mercurius Vitæ*, diaphoretic Antimony, Cerufs of Antimony, the Anti-hecticum Poterii, the Magistery of Lead, Minium, the Flowers of Antimony, and the Magistery of Bismuth, are reduced to their original metallic Bodies.

The mercurial reguline Part of Antimony is precipitated either by fixed alkaline Salts of all Kinds, which unite with and detain the Sulphur, or by metallic Bodies of an alkaline Nature, such as Iron or Copper.

All metallic Ores containing Sulphur, when treated in a dry Manner with Charcoal, Nitre, fixed and especially oleous Salts, precipitate the Metal contained in them.

C H A P. XXIV.

Of PUTREFACTION.

PUTREFACTION is an intestine Motion of mixed Substances, intimately destroying the Crasis and Union of the Parts which constitute such a Mixture. Hence it changes the Texture, and together with it, the Colour, Smell, Taste, and all the Qualities. The Subjects of Putrefaction are Animals, and all their Parts, as also Vegetables.

All those Substances which consist of heterogeneous Particles, a large Quantity of sulphureous, subtiler Earth, but a small Portion of Acid, such as the Bodies of Animals, are highly disposed to Putrefaction. But no homogeneous Bodies, such as distilled and expressed Oils, inflammable Spirits, Metals, Minerals, resinous Substances, Acids, and earthy Bodies,

dies, are subject to Putrefaction.

Moisture and Heat, greatly promote Putrefaction. Hence, all Bodies which putrify, whether of the animal or vegetable Kind, must be moist, since by this Means the heterogeneous Parts are dissolved, and the more expeditiously subjected to the Motion of the ethereal Fluid. Hence animal and vegetable Substances, when so dried as to be totally deprived of their Moisture, are no longer subject to Putrefaction.

A moist and temperate Heat is highly necessary to Putrefaction, because it assists the intestine Motion, and consequently the Putrefaction of the mixed Body. Hence the more intense the Cold is, the more effectually it prevents Putrefaction, by resisting the intestine Motion of the Parts of Bodies, and constricting and condensing their Pores more effectually. The free Access of the Air is absolutely necessary to Putrefaction, for which Reason Bodies do not putrify *in Vacuo*, or in Places from which the Air is secluded.

All spirituous Substances deprived of their Phlegm, as, also, distilled Oils, and liquified Resins, surprisingly prevent the Corruption and Putrefaction of Bodies. First, Because they render them hard, by

imbibing and carrying off the Moisture they contain. Secondly, Because they prevent the Access of the Air into their Pores; and Thirdly, Because as being homogeneous Bodies, they are not themselves disposed to Putrefaction.

Lixiviums impregnated with Salts, especially of the neutral Kind, preserve Bodies from Putrefaction, partly by rendering their Texture more firm and solid, and partly because they are absolutely unfit for undergoing Putrefaction themselves.

A Body already in a State of Putrefaction, easily produces the same Condition in another before free from it; because the former having an intestine Motion excited in its Parts, readily communicates the same to the latter; which however must be sufficiently disposed to such an intestine Motion.

Every putredinous Fermentation yields a volatile Salt, tho' of the fetid Kind. Hence all putrified Insects and Animals, in Distillation yield a volatile Salt, which is highly fetid. Worms and other Species of Animalcules are, also, frequently generated from Putrefaction; because the intestine Motion in the putrifying Matter, by producing a similar one in the Ova or Eggs, gives Rise to the Production of these Animals.

CHAP. XXV.

Of SUBLIMATION.

SUBLIMATION may be call'd a dry Distillation, perform'd in a close Vessel, with a violent Degree of Heat, by which some Bodies divided into extremely subtile

Parts, are elevated in the Form of Flowers, without having their Texture destroy'd. The principal Substances among Vegetables, subjected to this Process, are Camphire and Benzoin;

Benzoin; among Animals, their volatile Salts. Sal Ammoniac not only rises very easily itself, but also carries along with it many other Bodies, which when alone are fix'd, and incapable of being sublim'd; and hence by the Chymists it is call'd *the Eagle*. Sulphur and many sulphureous Minerals, are capable of Sublimation themselves, and render many other Bodies, which alone will not sublime, volatile. Hence the great Art of separating Metals from their Ores consists in destroying the mineral Sulphur contain'd in them, which carries away the metallic Particles, when subjected to a sufficient Degree of Fire, instead of fusing them.

Sublimation is frequently perform'd in Glass Vessels of various Sorts; as in a Body fitted with a blind Head, that is, one without an Orifice or Beak on the Side, that the Matter in the Body may be confin'd and collect'd in the Head; or in a common Matrafs, or a Florence Flask; or in Vessels made on Purpose, call'd *Subliming Vessels*. Sometimes earthen Vessels are employ'd. But *Stahl* recommends as the most commodious two very large Crucibles, the one inverted up-

on the other and closely luted together. The lowermost is expos'd to a naked Fire, and the Uppermost receives the sublim'd Matter. This Method is very convenient, when a great Heat is requir'd.

Sometimes Aludels are made Use of. Many of these are generally employ'd at the same Time in the following Manner: The Matter to be sublim'd is put into a Body, or Pot, the superior Part of which is fitted into a Hole on the lower Part of an Aludel, and the superior Part of the Aludel is received into the inferior Part of the next Aludel, and so on, till as many Aludels are set one upon another, as the Process requires; to the superior Part of the uppermost Aludel, a Head or Alembic is fix'd, to receive the Matter which sublimes. So that there is a continu'd Tube form'd by the Aludels, from the Pot which contains the Matter to be sublim'd, to the Head or Alembic which receives it, in the Manner that a continued Channel is form'd by a Number of Elm Pipes. The Use of Aludels seems to be, to remove the Matter sublim'd in the Head, to a Distance from the Fire.

C H A P. XXVI.

Of SULPHUR *and* INFLAMMABILITY.

SULPHUR is a mix'd Body consisting of acid, aqueous, and gross earthy Parts, and a subtle ethereal Earth, which is highly dispos'd to take Flame; and that an Acid enters the sulphureous inflammable Substance, is sufficiently obvious from many Experiments; for

every mineral Sulphur, whether dug pure, or adhering to Portions of Ore, when kindled emits an acid Spirit, which is the Reason why Sulphurs are absorb'd and dissolv'd by Alcalies, whether moist or dry, because the Acid intimately unites with the Alkali. Among Vegetables,

bles, all Woods, Resins, and Gums, which are inflammable, when distill'd, yield an acid Spirit.

The distill'd Oils have not a predominant and disengag'd Acid, yet that they retain some Degree of Acidity in their Reccesses, is sufficiently certain, since when mix'd with an alkaline Salt, and expos'd to a long protracted Digestion, they are converted into a volatile Salt, whilst the alkaline Salt assumes the Nature of a neutral Salt, or of a vitriolated Tartar.

All express'd Oils and Fats, when distill'd with alkaline Substances, become highly penetrating, as is obvious from distill'd human Fat, the *Oleum Philosophorum*, and the Oil of Soap; because the acid Water and grosser Earth remain in the alkaline Body, whilst the more subtile, ethereal, saline and sulphureous Parts are disengag'd and exalted. That highly rectified Spirit of Wine, which is nothing but an Oil subtiliz'd, and resolv'd in Phlegm by Fermentation, contains an Acid, is sufficiently obvious, because it reduces volatile Salts to Crystals, which are never produc'd without an Acid. Besides, highly rectified Spirit of Wine generally corrodes Lead and Tin into a white and sweetish Calx. And that every Thing which affords an inflammable Spirit is generated from an Acid, is sufficiently obvious from unripe Grapes, Apples, and other Fruits.

That a mineral Acid enters the Composition of Sulphur is sufficiently certain from its artificial Regeneration; for when Oil of Vitriol is mix'd with Oil of Turpentine, and distill'd in a Retort, a Substance exactly resembling mineral Sulphur, in its Effects, Colour and Smell, is sublim'd into the Neck of the Retort: Or, which is still plainer, when the Spirit of Sulphur, or the

acid Spirit of Vitriol concentrated in a fix'd Salt, is mix'd with any sulphureous Vegetable, or even animal Earth, such as Coals or Soot, a perfect Liver of Sulphur is produc'd, which when dissolv'd, and precipitated by the Acid of Wine, constitutes a Milk of Sulphur, which is nothing but a perfect and inflammable Sulphur.

The pinguious Earth of Animals impregnated with the universal Acid, and pinguious Salts, as Pot-Ash, impregnated with the aerial Salt, constitute Nitre, which is an inflammable Salt, if a sulphureous Earth is added to it, that this Earth by saturating the superfluous Acid may produce an inflammable Substance.

A true mineral Sulphur is produc'd from Antimony dissolv'd in diluted *Aqua Regia*; for the sulphureous Earth in the Antimony, upon the Approach of the Acid, is transform'd into a true inflammable Sulphur.

That Water is, also, an Ingredient in Sulphur is sufficiently obvious, from Fats, express'd Oils, and rectified Spirit of Wine; for the Water resists the Conception of Flame, which it rather extinguishes; and if it is mix'd in a due Proportion with an ethereal phlogistic Earth, and a subtile acid Salt, it proves the Occasion why the Flame is not soon dissipated, but lasts the longer. Thus we see distill'd Oils, which contain a small Quantity of Water, are very soon dissipated by Flame. But in rectified Spirit of Wine the Flame lasts longer, because in it there is hardly a thirtieth Part of the distill'd subtile Oil, whilst all the other Parts are aqueous. Besides, express'd Oils and Fats, which contain a large Quantity of Water, sustain the Flame longer than if they were distill'd and depriv'd of their Phlegm.

It is, also, certain from Experience, that Oils burn longer by an Addition of Water.

That an earthy Principle is, also, found in the Composition of Sulphurs, is certain from their Soot; for all Oils and Fats emit an oleous, black, and earthy Soot; which, also, holds true of the finer distill'd etherial and spirituous Oils.

Camphire, according to Mr. Boyle, is by Flame almost all converted into a black, inodorous, and insipid Soot. It is observable farther, that a great deal of Earth may be extracted from express'd and distill'd Oils, when by mixing them with Spirit of Nitre, or Oil of Vitriol, a Resin is form'd, which, when deflagrated, or rather distill'd, leaves a copious Earth in the Retort.

It is, also, remarkable, that the etherial Oils of Amber and Juniper, when distill'd by themselves, al-

ways leave a certain viscid earthy Magma, whilst the fine spirituous Oils fly off. The more thin and subtile this Earth is, the more volatile, hot, and fit for conceiving Flame are the Oils; and the grosser the Earth is, the more fix'd the Oils are, tho' they do not take Fire so soon, but retain it longer. This Earth is of an alkaline Nature, which is the Reason why Oils, whether express'd or distill'd, as, also, highly rectified phlogistic Spirits, produce a considerable Effervescence, and an intense Heat, with acid, fuming and concentrated Spirits, such as concentrated Spirit of Nitre, and fuming Spirit of Salt. This is, also, the Reason why highly rectified Spirit of Wine generally mitigates and corrects the Acidity of mineral Spirits, as is obvious in the Preparation of sweet Spirit of Nitre, of Salt, or of Vitriol.

CHAP. XXVII.

Of TRITURATION and LEVIGATION.

THESE are the two most simple Operations in Pharmacy, and are principally employ'd in reducing hard consistent Substances to the Form of a Powder. I should chuse to fix the Term *Trituration* to the Operation which is perform'd in a Mortar; and that of *Levigation*, to that which is executed by rubbing or grinding on a Porphyry, or Marble. And in this Sense, I think, the Terms are generally us'd.

Mortars are generally made of Wood, Marble, Iron, Brass, Lead, or Glass; but they must not be used indiscriminately, since acid and corrosive Substance, corrode Metals,

and if pounded or triturated in metal Mortars are impregnated with the Qualities of the particular Metals, in Consequence of which they can never answer the Purposes for which they were primarily intended; and hard Substances were away a Part of all Kinds of Mortars, so that their Qualities must be in some Measure altered by this Means.

It is also to be observed, according to Quincy, that in powdering every Preparation, the whole Ingredient, or Ingredients, with all their Parts to be used, should pass thro' the Sieve, and be equally mixed before any is used, since thro' a Neglect

glect of this Kind, several Medicines will in different Parts have different Efficacies, according as the most efficacious Parts, being more or less friable, pass the Sieve first, or remain behind; both which Circumstances will render particular Parts of the Medicine either too strong or too weak. Besides, in preparing Medicines of different Textures and Cohesions, some of the Ingredients pass the Sieve much sooner than others; so that there is an absolute Necessity of mixing them carefully after the whole is passed. Thus in powdering Jalap, Ipceacuanha, and other Substances, whose Virtues lie in their most resinous Parts, these being most brittle, break in the Mortar, and pass the Sieve first, in Consequence of which the Patients who use the first, are overdosed, whilst those who use the last,

which is only the fibrous and woody Parts, are miserably disappointed in their Expectations.

Those Medicines, also, whose Efficacy consists in the peculiar Shape and Points of their component Parts are considerably altered by Trituration; for the finer they are powdered the less powerfully they operate. Thus Calomel may be rendered much gentler, and consequently capable of being exhibited in far larger Doses, when it is thoroughly triturated in a Glass Mortar; for the continual Trituration has the same Effect upon it as repeated Sublimation, by breaking the saline Spicula till the Medicine becomes almost plain Mercury. But in resinous Substances, especially those of the purgative Kind, this Observation is reversed.

C H A P. XXVIII.

Of VOLATILIZATION.

THOSE Substances are said to be volatile, the Mobility of whose Parts renders them capable of being easily moved upwards, and dissipated in the Air. These Bodies consist of the most subtile, slender, highly divided, and fluid Particles; and as Æther and Air are the most moveable and pure of all Fluids, 'tis hence obvious, that volatile Substances must admit into their Mixture a large Quantity of ethereal and aerial Particles. But there are volatile Bodies, which consist partly of an ethereal or sulphureous Earth, partly of a saline ethereal Earth, and partly of a subtile mineral Earth.

Among those of the sulphureous Kind are; First, Inflammable Spi-

rits, which are nothing but ethereal Oils, resolved or subtilized by a fermentative and intestine Motion.

Secondly, Etherial distilled Oils, from Aromatic Roots, Seeds, and Resins; the Oils of Cloves, Amber, Juniper, Turpentine, Cinnamon; or the native Oils, as Petroleum.

Thirdly, Empyreumatic Oils extracted by a dry Fire; such as the fetid Oil of Tartar, Oil of Harts-horn, Oil of fossil Coals, and Oil of any Wood.

The Sulphur of Minerals is highly volatile, so that by a gentle Fire it is raised in a close Vessel, and generally carries along with it considerably heavy, metallic Parts. Saline volatile

tile Substances are of two Kinds, either urinous, or acid; the urinous are of all others the most volatile, and are produced from the animal Kingdom.

The best of the acid Volatiles are the Spirit of Sulphur, or the volatile Spirit of Vitriol, prepared in the open Fire, in such a Manner as that the Air may have Access to it. This Spirit in its Volatility, almost surpasses the urinous Salts, and flies off by the most gentle Fire.

Next to these are the Spirit of distilled Vinegar, prepared with the Crystals of Verdigrease, especially when concentrated by Sugar of Lead; the fuming Spirit of Nitre; and the fuming Spirit of Salt, which can hardly be retained in Glasses; as also Spirit of Nitre, and the volatile acid Spirit of Ants.

Among Minerals consisting of a volatile mercurial Earth, are Arsenic, Quick-silver, Bismuth, Cobalt, Antimony, and especially its Regulus. There are, also, various volatile Compositions. Thus Resins and bituminous Bodies are prepared of acid Substances and distilled Oils. Of volatile urinous Salts, and acid Spirits of Salt is prepared a Sal-Ammoniac, which when added to fixed Substances, Earths, and Metals, renders them volatile. Of Sal-ammoniac and Nitre is prepared a volatile acid Spirit, or fuming *Aqua Regia*.

Of Oil of Vitriol and common Salt is prepared the fuming Spirit of Salt. Of Oil of Vitriol and Nitre is obtained the fuming Spirit of Nitre; and of sublimated Mercury and Tin, is prepared the fuming Spirit of Salt.

The most fixed Metals may be rendered volatile, by the Addition of volatile Substances, as is obvious in *Aurum fulminans*, the whole of which flies off when it takes Flame. Thus, also, the *Luna Cornua*, which is nothing but a Magistery of Silver prepared with Spirit of Salt, or with common Salt, flies off in the Fire; as does also the *Saturnus Cornuus*, or a Magistery of Sugar of Lead precipitated with Spirit of Salt. Silver dissolved in Spirit of Nitre, if highly rectified Spirit of Wine is poured upon the inspissated Solution, is totally evaporated and flies off when Fire is applied to it. The fuming Spirit of Salt drawn off from Gold, Iron, or Copper, carries some of the metallic Particles along with it. Regulus of Antimony dissolved in concentrated Spirit of Salt, ascends in Distillation, as we observed in Butter of Antimony.

By Means of common Sulphur, Metals, and especially Silver, fly off in the Air; and mineral Sulphurs may be rendered totally volatile, by Means of volatile urinous Salt.

C H A P. XXIX.

Of L U T E S.

BY the Name of Lute or Luting, Chymists understand a mixed, tenacious, ductile Substance which proves solid with drying,

and, being applied to the Juncures of Vessels, closes them in such a Manner, as to prevent the Air from either getting in or out; but these

Lutings are of principal Use, in confining the Particles rais'd by the Fire in Distillation, so as to prevent their escaping out of the Vessel; and hence it appears, that different Lutings are required, according to the Difference of the Subjects to be distilled.

Boerhaave's Directions for Luting are thus:

“ When the Subject is meerly aqueous, Linseed Meal ground to a fine Powder, and well mix'd, or work'd up into a stiff Paste with the White of an Egg, makes a proper Luting; for being applied to the Junctures of distilling Vessels, it grows hard with Heat; and if it happens to crack, it is easily repair'd by a fresh Application, which soon grows solid. But a Paste made of the same Meal well work'd up with cold Water, very well answers the End in the Distillation of all fermented inflammable Spirits, and all volatile alkaline Salts. This Paste will not answer in the Distillation of mild Acids, or acetous Liquors, which soften and dissolve it, so as to let the Fumes escape: In these Cases, therefore, a Bladder steeped in Water till it grows slimy, makes an excellent Luting, by being applied and press'd wet upon the Junctures of the distilling Vessels.

A Luting that acquires a stony Hardness, is necessary in the Distillation of fossile Acids, as those of Vitriol, Sea-Salt, and the like, which is call'd the Philosophical Luting, and may be prepared from the Calx of Copperas, and quick Lime, by boiling the Caput Mortuum of Vitriol, in several Parcels of Water, till it be thus thoroughly wash'd from its saline Parts; then drying the Powder, and preserving it in a close Vessel. This Powder is to be rubb'd with an equal Quantity of strong quick Lime, and wrought into a Paste with the White of Eggs, first

beat thin; and this Luting is immediately to be applied to the Junctures of the Vessels, the Vessels being first a little heated. If it be not applied quick, it presently dries to a stony Hardness, so as to be untractable; but, when properly us'd, it confines all the saline Spirits, like Glass itself. Or, a Luting for the same Purpose may be prepar'd without much Trouble, in this Manner: Beat pure Sand and Potters Clay together, in such Proportion, with Water, till the Matter no longer sticks to the Fingers; then add one fourth Part of common Lime, so as to make the Paste sufficiently strong; and the drier this is applied, the better for the Purpose, provided it be left ductile; for thus it hardens into an excellent Cement, and the Cracks, if any should happen, are easily stop't up with the same.

It is a great Inconvenience in the stronger Distillations with a naked Fire, that, when the Vessels are violently heated, they are subject to crack, and fly to Pieces, upon opening the Door of the Furnace, and letting in the cold Air, or throwing in fresh Fuel; and it is highly proper here to defend the Vessels by a Coating from this sudden Impulse of Cold; and this is frequently necessary, also, when the Operation is perform'd in glass Vessels, and a Sand Heat, if the Fire be so strong as to indanger the Melting of Glass. The best Luting, for this Purpose, is made, by beating fat Potters Earth and powder'd Sand, with Water, into a well wrought Paste, which will not stick to the Fingers, adding thereto a little common Lime at the last, and beating them well together. Then the Vessel to be coated, being warm'd and expos'd to the Vapour of hot Water, that its whole Surface may become dewy, let this Cement be spread all over it equally with the Hand; afterwards sprinkle the Surface

face of the Coating with hot and dry Sand, and set the Vessel in a cool Place, that the Coating may dry slowly, taking Care to fill up the Cracks in the same Manner, if any should happen in the drying. If thus the Coating should be thoroughly dried, the Vessel will sustain the Action of a violent Fire unhurt.

There is another Kind of Cement, made Use of by some Chymists of *London*, to answer the same End, consisting of sifted Wood Ashes beat up to due Consistence with the White

of Eggs and a little Gum Water. The same Service may be had in a more excellent Manner, as well for crack'd Glasses as broken China; or the like, from what the Painters call drying Oil, or a Mixture of Linseed Oil and Cerufs, made by Insolation or Decoction, into a perfectly white Balsam, and afterwards ground upon a Marble with fresh Ceruse, till the Whole is perfectly fine, and become of the Consistence of an Unguent. This dries slowly, but is very effectual.

The End of the First B O O K.



T H E N E W

English Dispensatory.

B O O K II.

Of the Operation of MEDICINES.

SINCE almost the whole Duty of a Physician consists in seasonably administering such Things as are proper to preserve or restore Health, and are effectual to relieve the Sufferings of his Patient, and at the same Time in artfully avoiding whatever may be unwholesome, or prejudicial, it is plain, that nothing is so necessary to accomplish these Purposes to a desirable Degree of Perfection, as a distinct and accurate Knowledge of the Instruments by which Health is preserv'd or restor'd: Now this Knowledge supposes not only an Acquaintance with their Efficacy and Vertues, but, also, with their Elements and Manner of Operation; by which Means a Physician may be enabled to judge, by solid Reason, what are the Things, in all the *Materia Medica* which are serviceable, or prejudicial, in this or

that Distemper, to this, or that peculiar Person, at such or such a Season, with a due Regard to all other Circumstances. That he may rightly conduct himself in these Affairs, and be ready furnish'd with proper Means to answer all Emergencies, nothing seems fitter, and more conducive to the Purpose, than an artful and compendious Distribution of all the *Materia Medica* under certain Heads, according to their Principles, their Way of Operation; and the Effects, which under such and such Conditions, they are adapted to produce.

Medicines may be dispos'd under their general Heads in a proper and compendious Way, if we consider, that whatever is subservient to the Ends of Medicine, is directed in its Manner of acting towards the Removal of the Causes of Diseases. But in every Disease there is a Depavation, either in the Motion, or

in the Matter which is moved, or even disposed to move: And since Motion is excessive or defective, either in the Whole, or some Part of it, and Matter is in the Fault either upon Account of its Quantity or Quality, all Remedies, must, in general, be concerned in the Regulation of depraved Matter or Motion. To Matter vitiated in Quality, we appropriate *Alteratives*; to Matter offending in Quantity, *Evacuants*; if, on the other Hand, Motion is defective, or impair'd, or if the Parts have lost their proper Tone, restorative and corroborative Medicines are to be us'd; and if the Motion is too intense and accelerated, or the Parts wrack'd with Spasms, then and in that Case, sedative and composing Medicines are, of all others, most efficaciously administer'd.

These are the few general Classes of Medicines, to which all the Stores, with which indulgent Nature has enrich'd the Art of Physic, may be reduced; for by this Means, and by the Assistance of these Helps, all the several Intentions of the medicinal Art, may be exactly and effectually answer'd. So that *Hippocrates* has given a Definition of Physic, which is at once beautiful, and truly mechanical, when he says that it is, "No more than an Addition and Substraction seasonably made; a Substraction of those Things which exceed, and an Addition of those Things which are defective. He who best can do these two Things, is deservedly esteemed the best Physician; and the less a Man is qualified for carrying on these two Designs, the more ignorant he is of the true and genuine Principles of Physic." *De Flatibus, Lib. 3.*

Then as to what relates to the Influence and Operation of Medicines, they act directly and immediately, either upon the fluid, or the solid

Parts of the Body; so that the alterative and evacuating Medicines are appropriated to the Fluids, and those of a corroborative and composing Quality to the Solids. But as liquid as well as solid Bodies are of different Qualities, so they produce their respective Effects in different Ways; for some Medicines by their immediate Action, affect the most subtle, and easily moveable Fluid which is lodg'd in the Brain and Nerves, and is the chief Instrument of Motion and Sensation, either by augmenting its Quantity, or accelerating its Motion: Such as analeptic, cordial, and fragrant Medicines; or by quelling, and becalming its more violent Motions, such as anti-hysterical and anodyne Medicines, Opiates and Pœtids, which even when exhibited in very inconsiderable Doses, produce very sudden, and almost instantaneous Effects. Other Medicines operate immediately upon the Blood and Juices themselves, such as those of the diluting, incrassating and attenuating Kinds; and, also, such as are endowed with an absorbent Quality, or are calculated for subduing any corrosive or sulphureous Acrimony.

Those Medicines which induce a Change upon the Solids, produce their immediate Effects upon the more nervous Parts, as the Stomach and Intestines, which are endowed with a most exquisite Sensation. To this Class belong all the medicinal Preparations of Minerals, which produce their Effects when given in small Doses, resolve themselves into Particles of an incredibly small Size, without losing their Texture and Vertues, enter the minutest Recesses of the nervous Parts, and are with some Difficulty wash'd away: Such as, among Emetics, *Emetic Tartar*; among salivating Medicines, *White Precipitate*; among Sulphurs, the *Sulphur of Antimony*; to which volatile Salts may be added; Other Sub-

stances strongly stimulate the nervous Parts, by that subtle caustic Salt with which they abound; such as among Poisons, *Arsenic*; among Purgatives, *white* and *black Hellebore*, *Gamboge*, *Resin of Jalap*, and some more of the same Kind, together with all Insects, especially *Cantharides*. 'Tis nevertheless to be observ'd, that of Medicines of this Kind, some affect particular nervous Parts more than others; for Instance, mercurial Preparations affect the Glands, the Lymphatic Ducts, and the Fauces; Emetic Preparations of Antimony affect the biliary Ducts; Preparations of Colcynth, the nervous Coat of the Intestines; Hellebore of *Æsophagus*, *Larynx*, and *Asperia Arteria*; *Cantharides* and other Insects, the nervous, urinary, and feminal Ducts; and in fine, oily volatile Salts, and Sudorifics prepared of the volatile Salts of Animals, affect the Coats of the arterial Vessels. Some others of those Medicines that are appropriated to the Solids, insinuate their Virtues more effectually into the muscular and fibrous, than into the nervous and membraneous

Parts; among the Number of which are all those Corroboratives which abound with a sulphureous, or with a mild Astringent, fix'd, and earthly Principles.

The whole Body of Medicines in general, is with Reason distinguish'd in this Manner, and in this Manner are we to form our Ideas of their respective Methods of acting, and Manner of operating. But as the Art of Physic, in Order to become rational, must be built upon most evident Causes, all obscure ones being rejected, as *Celsus* says, not only by the Physician, but also from the Art of Physic itself, so that particular Branch of Physic which displays the Vertues of Medicines, and accounts for their Methods of Operation, is to be drawn, not from obscure and too remote Causes, nor from the atomical and geometrical Principles of the Magnitude and Figure of the Parts, which are in reality incomprehensible; but from Causes that are evident, immediate, comprehensible, subjected to our Senies, and made known by Experience.

CHAP. I.

Of E M E T I C S.

AMONGST the several Medicines of the evacuating Kind, *Emetics*, or such as excite Vomiting, are none of the least considerable. These are either mild and gentle, or of a more strong and drastic Nature. Among the former, we may justly reckon common Water render'd tepid, with the Addition of a little Salt and Honey, or express'd Oil or Fat; or a Decoction of the Seeds or Root of Horse Radish, or the Seeds

of Dill with Water, or the Waters of warm mineral Springs drank in large Quantities at a Time.

Among those of the more violent and drastic Kind, the vegetable Kingdom supplies us with the following. The Leaves and Root of *Asarabacca*, white *Hellebore*, the Juice of the middle Bark of the *Elder Tree*, *Gamboge*, *Ipecacuanha*, and all the drastic Purgatives exhibited in too large Quantities. Among Metals

Metals and Minerals, all Preparations of Copper, such as white *Cyprian Vitriol*, the *Gilla of Paracelsus*, and *Angelus Sala*, prepared of the *Caput Mortuum* of the Oil of *Goslar Vitriol*, which partakes of the Nature of Copper; the Crytals of *Verdigrease*, as, also, such Substances as receive their Emetic Qualities from the reguline Part of Antimony they contain, such as Emetic Tartar, Glafs of Antimony, and the Preparations thereof, the *Mercurius Vitæ*, especially when prepared of the rectified Butter of Antimony by Precipitation with common Water, or Oil of *Tartar per Deliquium*; the Golden Sulphur of Antimony, and many others. The milder Emetics, and such as are pretty much of a diuretic Nature, were much used by *Galen*, and the Ancients, as they are safe, and generally by their Quantity, stimulate the Stomach to vomit, especially when it is weak, and disposed to throw up its Contents, which may be discover'd by a *Nausea*, Eructations, Bitterness of the Mouth, and the uneasy State of the Patient. But these do not act beyond the Limits of the Stomach, from which they very advantageously evacuate crude, phlegmatic and bilious Humours, produced by improper Aliments, or a bad Digestion.

The more strong and drastic Emetics, when exhibited in a small Dose, by their fiery, caustic, saline-sulphureous Acrimony, act not only on the nervous Coat of the Stomach and Intestines, by spasmodically contracting them, but if exhibited in a somewhat larger Dose, they penetrate beyond the Stomach into the highly nervous biliary Ducts, into the Glands of the Intestines, Mystertery and Pancreas, as also into the Liver, and expel their contain'd Humours from these Parts; sometimes, also,

they affect the whole nervous System, and prove highly injurious to the Constitution.

The Ancients as an Emetic of the most drastic Kind, us'd white Hellebore, as *Celsus*, in his 13th Chapter of his *Second Book*, informs us, in Epilepsies, Madness, and other terrible Disorders, when not accompanied with a Fever; but he justly advises, that the Body should be duly moisten'd, before this Medicine is used; but in our Days as we have more safe Emetics, we justly abstain from this drastic Medicine, and make Choice of such of the abovementioned, as are more friendly to Nature and the nervous System, and may be exhibited with less Danger: Among which we may justly give the Preference to that *American Root* *Ipecacuanha*, half a Dram or more of which may be exhibited for a Dose: This Root besides its saline, subtil, and acrid Principle, also, contains one of a balsamic and corroborating Quality, and has this particular Advantage attending it, that it soon produces its Effects, for which Reason it is very properly us'd where Delays may be attended with bad Consequences. And because in vomiting the peristaltic Motion of the Stomach, and by Consent that of the Intestines, is inverted, if the Vomiting is very intense in a Diarrhæa or Dysentery, the Flux is by that Means checked and stopt for some Time. Thus *Celsus* justly affirms, that Vomits stop Fluxes, and render the Body soluble when costive. The most commodious Succedaneum for *Ipecacuanha* is *Asarabacca*, the Root and Leaves of which are possess'd not only of a subtil, acrid, volatile and caustic Principle, which in boiling exhales, but, also, of a corroborating and balsamic Quality, and afford singular Relief in inveterate Fevers of the

Tertian and Quartan Kind, as, also, in Dropfies, and the Jaundice. Among antimonial Preparations, we give the Preference to emetic Tartar, prepared of the *Crocus Metallorum*, and not of Glafs of Antimony, which is as strong again. Three or four Grains of this Tartar, either alone, or in a smaller Dose with Ipecacuanha, prove an excellent Vomit. And if the Intention is to purge, at one and the same Time, two or three Grains of Emetic Tartar may be added to a Decoction of Manna; and in a pituitous Asthma, this End is sometimes very commodiously answer'd, by two or three Ounces of Oxyssel of Squills; but as for the Emetic Preparations of Copper, which by their constructive Quality long exagitate the nervous Coats of the Stomach, and other Parts, as, also, the reguline Powders of Antimony, the Glafs of Antimony, and the *Mercurius Vita*, whose Effects cannot be depended on, since they act either too strongly or too weakly, according to the State and Disposition of the Humours in the Stomach, we ought carefully to abstain from their Use, and may be very well without them in the *Materia Medica*.

Drastring Emetics are sometimes not only useful, but absolutely necessary, for expelling Poisons, especially of the Narcotic Kind, as, also, the infectious Particles, which exhale from Patients labouring under contagious Disorders, which descending to the Stomach, there mix with the Juices, and unless soon carried off, are convey'd into the Mass of Blood. In like Manner, drastring Emetics are necessary for evacuating the corrupted and peccant Humours arising from the Commixture of heterogeneous Aliments, the Bile, and fermenting salival Humours, which stagnating in the Stomach and Intestines, especially the *Duodenum*,

become corrupted by their Continuance there, and frequently give Rise to Fevers of the slow, the Quotidian, and Quartan Kind, as, also, to chronic Coughs, to violent Disorders of the Head, Melancholy, a Hemiplegia, and sometimes to an Epilepsy, or Apoplexy.

In Diseases arising from thick Bile, form'd, as it were, into a viscid Coagulum, and obstructing the biliary Ducts, such as the black and yellow Jaundice, a Cachexy, and some others, Emetics are sometimes used with Success, when other Medicines prove ineffectual; since they attenuate the bilious Sordes, which give Rise to these Disorders.

In Anasarca, Leucophlegmatias, Ædematous Swellings of the Parts, and a curable Ascites, Emetics exhibited in a pretty large Dose, frequently carry off by Stool, but rarely by Vomit, the aqueous Serum from the Liver, and the Ducts and Glands of the Intestines, Mesentery, and Pancreas.

In all feverish Paroxysms, Inflammations of the Stomach, or Cases where it is affected with Spasms, as for Instance, in Cordialgias, violent Anger, hystERIC and hypochondriac Spasms, and where there is a Disposition to Spitting of Blood, or an immoderate Discharge either by the Menses, or hæmorrhoidal Veins, as, also, in all Diseases arising from a Congestion of Humours to the Head, such as Apoplexies, Palsies, Vertigoes, violent Head-achs, a Loss of Hearing, or Sight, Vomits are never to be used; nor are they to be exhibited to plethoric Patients, till the Plethora is remov'd by Bleeding; nor to those whose Intestines are stuff'd with Feces, till they are pre-viously evacuated, and purged off.

'Tis proper, in order to make Emetics work more easily, to exhibit them always in a liquid Form, or in a sufficient Quantity of some moistening,

tening, relaxing, and pinguious Vehicle; for Vomiting not only requires a powerful Constriction of the Pylorus, and Bottom of the Stomach, but also a Relaxation of the superior Orifice of the *Æsophagus*.

During the Operation of Emetics, and after it is over, the Patient is carefully to guard against Cold, to abstain from cold Liquors, from the Sallies of Passion, from hot and stimulating Medicines, from acrid and salt Aliments, and rather to use such as are of a demulcent Nature, afford laudable Juices, and are of easy Digestion. It is of singular Use to drink a few Ounces of Asses Milk,

if it can be had, about four Hours after the Operation of the Vomit is over.

It is laid down as a perpetual Rule, by the best practical Authors, that, in acute Cases, Bleeding should always precede the Exhibition of an Emetic.

Common Salt is given to check the too violent Operation of Emetics, which it does by inclining them to pass off by Stool. Violent Vomittings, are, also, stopp'd, by copious Draughts of warm diluting Fluids; by mild Oils, by Opiates, Aromatics, grateful Acids, and corroborating Medicines, either taken internally, or applied externally to the Region of the Stomach.

CHAP. II.

Of CATHARTICS.

AMONG the several Species of Evacuants, none are of greater Importance than those which eliminate and discharge the recrementitious and peccant Matter contained in the Body, by Stool; the Medicines of this Kind are either mild and gentle, or strong and drastic. Those which safely, mildly, and without any Injury to the Stomach, and nervous System, render the Body soluble, are called *Lenitive*, or *Laxative* Medicines, or *Eccoprotics*. Those which evacuate the Contents of the Intestines, in a more efficacious and forcible Manner, come under the Denomination of *Purgatives*. Of the former Kind the principal are, among vegetable Substances, Manna, Rhubarb, Cassia, Agaric, Tamarinds, Sena Leaves, Aloes, Buckthorn Berries, Raisins, Polypody, Peach Flowers, those of the *Egyptian* Thorn, as also the Flowers, and Seeds of Violets. Among Salts, common Salt, Borax, and Nitre; as

also those obtained from medicinal Springs, such as those of *Epsom*, and many others. Among Substances supplied by the animal Kingdom, Milk, especially that of Asses, and Whey. Among chymical Preparations, the Terra foliate Tartari, vitriolated Tartar, Cream of Tartar, a Salt prepared of Alum and Salt of Tartar, the essential Salt of Wood Sorrel, the Magnesia, Sal Polychrestum, Aurum fulminans, Mercurius dulcis, Flowers of Benjamin, as also many compound Medicines. These gentle Laxitives, without greatly disturbing or weakening the peristaltic Motion of the Stomach and Intestines, not only evacuate the Feces, but when exhibited in pretty large Doses, copiously discharge the Serum from the Glands of the Intestines. Nor, like the more drastic Purgatives, do they operate by an acrid, subtle, and caustic Salt, which proves noxious to the nervous Parts, but, by an innocent and harmless

Kind

Kind of Substance, which, however, is of a fine saline, and stimulating Nature, and which evaporates, and is lost by long boiling, as is obvious from Manna, Rhubarb, Aloes, and Sena Leaves, which for this very Reason, are more properly infused than prepared by Decoction. But these Laxatives act either by a certain saline and stimulating but mild Principle, as Manna, Cassia, Raisins, and Polypody; or by a certain subtil, sulphureous, bitterish, and earthy Salt, as Aloes, and Rhubarb; or by an acid Salt, which vellicates the Fibres, as Tamarinds, Cream of Tartar, and Salt of Wood Sorrel; or they act by Means of a neutral Salt, as Nitre, Borax, Sal Gemmæ, the Arcanum duplicatum, vitriolated Tartar, Salts obtained from medicinal Waters, and the essential Salts of Herbs; or they operate by Means of a certain calcarious and bitterish Salt, as the Salts of some mineral Waters; or, lastly, they act by Means of a calcarious Earth, as the Magnesia, which being dissolved by the Acid of the Primæ Viæ, is converted into a neutral, acrid, and stimulating Salt.

These highly safe laxative Medicines, which are of singular and uncommon Use in the Cure of many Disorders, and for that Reason by some distinguished by the Epithet *Benedicta*, were little known to the Ancients, in whose Works we find not the least Mention of Aloes, Rhubarb, Tamarinds, Sena Leaves, and Agaric, but only of Cassia and Polypody, among the gentler Purgatives. *Dioscorides* was the first who wrote any Thing concerning Rhubarb and Aloes, and from him *Pliny* and *Galen* took what they delivered concerning these Medicines: But Tamarinds, and Sena Leaves, were first known to the *Arabian* and *Egyptian* Physicians. But tho' all Laxatives agree in this, that they render

the Body soluble, without Danger, Violence or Commotion, yet in Practice, they ought necessarily to be distinguished according to the Differences of Diseases, and the various Constitutions of Patients. Manna, for Instance, Cassia, Raisins and Polypody are exhibited with singular Advantage in Disorders of the Breast, such as a Cough, a Spitting of Blood, a Pleurisy and a Phthisis; as also in those Diseases which arise from a saline, acrid and scorbutic Serum, such as Gouts, Rheumatisms, Itches and purple Eruptions. In these Cases, the abovementioned Medicines are preferable to others, because they not only discharge the internal Fæces, but, at the same time, allay, and correct the saline Acrimony of the Fluids. Gentle Acids, such as Tamarinds, Cream of Tartar, Salt of Wood Sorrel, as also the essential Salts obtained from nitrous Herbs, Sal Polychrestum, and antimoniated Nitre, are highly proper in hot Climates, and in the Summer-time, for Patients of cholic Habits, as, also, in Disorders arising from too large a Quantity of Bile, and those attended with a pertematural Heat, in continued, double, and Summer tertians, as, also, in a burning Fever, attended with an insatiable Thirst. In these Cases the Medicines now mentioned are preferable to others, not only on Account of their evacuating Quality, but, also, because they check the intestine Motion of the sulphureous Parts of the Blood, and correct the exorbitant Acrimony of the Bile. In Disorders arising from a Defect of Bile, and the Want of a balsamic Sulphur in the Blood, such as Cachexies, and almost all chronical Disorders, which are attended with an Inspissation of the Juices, and an Infraction of the Viscera, bitter Laxatives, such as Preparations of Rhubarb and of Aloes duly corrected, are justly preferable to all other Medicines; but in Disorders

Disorders arising from tough and viscid Humours lodged in the *Primæ Viæ*, and producing Loss of Appetite, Distentions of the Hypochondria, Eructations and Flatulencies, all neutral Salts, whether chymically prepared, or the native Salts of medicinal Springs, exhibited in a pretty large Dose, and with a sufficient Quantity of some proper Liquor, render the Body *soluble*, and discharge the thick and viscid Recrements. When an Acid, as it generally happens in hypochondriac and melancholic Patients, as also those labouring under quartan Fevers, abounds in the Habit, and eludes the Force of the most acrid Purgatives, in this Case, besides Preparations of Manna, the Magnesia is singularly beneficial, which, as it is entirely dissolved by Spirit of Vitriol, and passes into a neutral Salt of a bitterish Taste, and purgative Quality, so it assumes the same Virtue and Nature, when it meets with an Acid in the Stomach. But, on the contrary, when a dissolvent Liquor is not found in the Body, it operates little or none, and proves more injurious than beneficial.

Aurum fulminans and Mercurius dulcis, are, indeed, generally classed among the Laxatives, but their Use is not altogether safe; for when Aurum fulminans is thoroughly edulcorated, its Operation is very languid, or absolutely none at all. On the contrary when it is richly impregnated with Salino-Nitrous Spiculæ, it indeed renders the Body soluble, because, in Consequence of its Gravity, it strongly adheres to the Coats of the Stomach, and Intestines; but in delicate Patients, it excites violent Gripes, Flatulencies and other terrible Symptoms; besides, it proves highly prejudicial, where there is a large Quantity of Acido-corrosive Humours, or caustic Bile lodged in the Stomach or Duodenum. Many, in order to heighten the purgative Qua-

lity of Aurum fulminans, mix neutral Salts with it, such as the Arcanum duplicatum, or vitriolated Tartar. Nor is it to be denied, that half a Dram of either of these Salts triturated with two Grains of Aurum fulminans, acquires a mettalline Taste, and, by stimulating the Intestines, eliminates their Contents; but this Effect is rarely produced by it without Gripes. But we are above all Things to take Care, that Mercurius Dulcis, be not triturated along with Salts, especially those of an alkaline Nature, or Sal-ammoniac, since by this Method of preparing, its corrosive Quality is reviv'd, by which it acts upon the glandular and nervous Systems, and often excites a troublesome Salivation.

All the Salts above enumerated, especially those of the neutral and bitterish kind, when half an Ounce or an Ounce of them is exhibited for a Dose, in a sufficient Quantity of some proper Liquor, are possessed of a singular Virtue in rendering the Body soluble, without any Commotion of the Blood, or Loss of the Appetite and Strength. And they may be at once more safely and efficaciously used, than the drastic Purgatives obtained from the vegetable Kingdom, especially in Diseases and Constitutions, where a large Quantity of thick and viscid Humours are lodged in the *Primæ Viæ*, or in the Vessels. Hot and cold mineral Springs, generally called *Acidulæ*, and which are singularly efficacious, both for the Preservation and Cure of chronical and obstinate Disorders, derive their aperient, detergent, and purgative Qualities, from the aqueous, but much more from the saline Principle they contain.

Among Flowers of a laxative Quality, the most considerable are those of the *Egyptian Thorn*, Peaches, Violets, and Roses; but they ought to be recent, and be only infused, but not prepared by Way of Decoction.

coction. These are most advantageously exhibited with sweet Whey, or Asses Milk, especially in the Spring; and the Patient, especially when delicate and tender, ought every Morning, for some Weeks, to drink about half a Pint of such a medicated Draught, in order to purify his Blood; for both Whey and Asses Milk are possessed of a certain laxative Quality, as *Celsus Lib. 2. Cap. 12.* thus informs us, "There are" (says he) certain Diseases, in which "purging by Milk is highly proper. And a little after he subjoins; "The Ancients, after adding a little "Salt to the Milk of Asses, Cows, "or Goats, boiled it, and removing the coagulated Parts, ordered "their Patients, in certain Cases, to "drink the remaining Whey."

Laxative Preparations of Aloes, either heptic or succotrine, are Medicines of uncommon Efficacy, if the Aloes is, by a proper Method, previously freed from its prejudicial, sulphureous and volatile Principle, and from its Resin, which firmly adheres to the Coats of the Intestines. But even after these Precautions, the Dose must be small, and mixt up with bitter Extracts, and mild balsamic Ingredients. Pills made upon this Model, may be advantageously prescribed, not only with Intention to render the Body gently soluble, but also in order to restore and corroborate the Tone of the Intestines, which, being weakened in many Diseases, is still more impaired by the Use of drastic Purgatives. And tho' these Pills produce but faint and almost insensible Effects in Patients of robust Constitutions, and such as abound with Blood, yet their Operation is more speedy and considerable in Persons naturally delicate, or such as are weakened by the Shock of a Distemper; as also in Child-bed Women, or those whose monthly Evacuations are irregular or obstruc-

ted. For Patients whose Digestion is weak, when recovering from any Disorder, they are also highly proper, for correcting and evacuating crude Juices; as also for hypochondriac Persons, whose Stomachs continually throw up acid Crudities. On the contrary, Preparations of Aloes exhibited in large Doses, and without proper Correctors, throw the Blood into violent Commotions; for which Reason plethoric Patients, those of delicate Constitutions, and such as are subject to Evacuations of Blood, ought entirely to obtain from them, because, when preposterously exhibited, they are attended with this particular Disadvantage, that they excite very painful blind Hæmorrhoides, and drive the Blood to the Region of the Loins, and the Parts contained in the Pelvis.

But the Contents of the Intestines are evacuated in a far more efficacious and powerful Manner, by what we call strong *Purgatives*. Of this Class the most considerable are, the Roots of black and white Mechoacan, of Jalap, of black and white Hellebore, common Flower de Luce, Bryony, and Esula, the Herbs, Soldanella, Gratiola, purging Flax, Coloquintida, purging Nuts, the Seeds of the Cataputia, Turbith, the middle Bark of Elder, Gamboge, wild Cucumber, and Scammony, together with the Shop Preparations of those.

The Principle by which those drastic Medicines operate, is of a highly virulent Nature, and the fine caustic and inflammatory Salt, which in a very small Dose attacks the nervous Membranes, not only of the Stomach and of the Intestines, but also of the whole Body, in the same Manner Poison does, act with Violence on these Membranes, and generally excite spasmodic Constrictions, and Uneasiness of the Præcordia, Cardialgias, and Gripes, accompanied with frequent Stools, Hiccups,

Inflammations of the Stomach and Intestines, Coldness of the Extremities, and sometimes Convulsions; for that the Salt contained in these Purgatives, is highly subtil and active, and diffuses its Virtue thro' the whole Mass of Humours, is sufficiently obvious from this, that the Child is purged by the Milk of the Nurse who has taken such a Purgative. And sometimes by the external Application only of Purgatives, violent formidable Fluxes have been brought on. Thus *Heurnius* in *Comment. in Hippocrat.* informs us, that the Ancients purged themselves by washing their Feet in a Decoction of white Hellebore. *Walæus de Meth. Med.* informs us, that a Piece of Hellebore, used for cleansing an Issue, excited a Vomiting, and proved purgative. And an Ointment in which Coloquintida is an Ingredient, laid upon the Navel, purges not only Children, but also Adults. But the Caustic and Inflammatory Nature of strong Cathartics, is sufficiently obvious from this, that, when externally applied, they burn the Skin, and excite Blisters like a Vesicatory. The Juice of the Esula consumes Warts, and the Essence extracted from the drastic Purgatives, such as Jalap, Mechoacan, and Scammony, when swallowed, burns and corrodes the Fauces, and Æsophagus, and excites hot Pustules and Aphthæ. And certainly the virulent and poisonous Quality of drastic Purgatives is sufficiently evinced by the Experiments of *Wesfer*, who in his *Tract. de Cicuta aquatica* informs us, that he gave various Purgatives in a certain Quantity to Whelps, immediately after which, Vomitings, Convulsions, and at last Death ensued. Upon dissecting these Animals, the Stomach and small Intestines were found inflamed, and marked with red Spots, just as if they had taken Arsenic: And what deserves our Attention is,

that according to the express Words of the Author, the same Phenomena are exhibited, and the same Effects produced, by the Resin of Jalap, so much used in our Days.

Since, therefore, the Operation of the more acrid and drastic Cathartics is so violent, dangerous, and sometimes fatal, the prudent, rational, and cautious Physician ought seldom to prescribe them. 'Tis sufficiently confirmed by Experience, that in all Ages greater Havock, or more terrible Consequences, have not been produced by any Medicine, than by drastic Purgatives preposterously and unskilfully exhibited. None of the Shop Preparations so quickly and powerfully impair the Strength, change the Pulse, injure the Stomach, or prejudice and disturb the natural Strength thereof, and the Intestines, as acrid and drastic Purgatives. *Hoffman* takes Notice of several Patients who by a frequent and repeated Use of these, have brought on themselves Dropsies, hypochondriac Disorders, Inflammations of the Stomach, accompanied with Fevers which have proved mortal, Dysenteries, a Cholera Morbus, and sometimes a Palsy of the right or left Side. The Ancients, indeed, to whom the mild Laxatives, and the Use of the Salts were in a great Measure unknown, frequently prescribed these drastic Purgatives; and *Hippocrates* himself purged his Patients principally with Elaterium, and Hellebore; but if we carefully look into their Works, we find that they did not exhibit these drastic Purgatives, except in Cases where the Danger of the Patient rendered them necessary, and even then they made their Patients drink Milk before and after the Exhibition of the Elaterium, to the Virtues of which they attributed a great deal; and they corrected the Hellebore with an Admixture of Mulfum, Oil, or Milk. Besides, they

they did not promiscuously use these Medicines, but accurately distinguished in what Cases they were proper, and in what not. And *Hippocrates* expressly forbids the Use of them in all Fevers, and inflammatory Disorders. Besides, that the bad Consequences produced by drastic Purgatives were not unknown to the most skilful of the ancient Physicians; is sufficiently obvious from the Precepts and Maxims every where occurring in their Works: This is asserted in express Words; in the 37th *Aphorism* of the *Second Section*, where we are told; "That those who are in a State of perfect Health, are speedily reduced to a deplorable Condition, by being purg'd." And in the 16th *Aphorism* of the *Fourth Section*, *Hippocrates* confirms this Truth. *Heurnius*, in his Attempt to demonstrate the Truth of this *Aphorism*, adds, "I have seen sound and healthy Persons, to whom a simple Purgative Apozem of Fumitory and Sena Leaves, rashly exhibited, has proved fatal." *Celsus*, also, in *Lib. I. Cap. 3.* informs us; That as Purgatives are sometimes necessary, so when frequently used, they prove dangerous; and in the 12th *Chapter* of his *Second Book*, he has these Words, "Purgatives generally injure the Stomach, weaken the Patient; and are never properly prescribed; except in Disorders unaccompanied with a Fever." *Dioscorides*, *Lib. 4. Cap. 178.* declares himself of the same Sentiments, and affirms, that Purgatives are highly prejudicial and unfriendly to the Stomach. But *Campegius* in a particular Book, has treated of the poisonous and hurtful Quality of Purgatives, in a more full and circumstantial Manner than any who went before him. *Helmont*, also, and his Followers, as also *Bontekoe*, did not scruple to call Purgatives mortal Poisons. *Montanus*, *Crato*, and *Selenander*, Men well ac-

quainted with the healing Art, were much afraid of prescribing them; but frequently used Pills of bitter Extracts, Gums, and Aloes. But the drastic Purgatives, are in a particular Manner hurtful and injurious to Patients of weak Constitutions, Children, and old Persons, to those who are recovering from a Disease, whose Stomachs are weak, or whose nervous System are subject to disorderly Motions. Not is there any Medicine more prejudicial to Men of choleric and delicate Constitutions; after the uneasy Shocks of Grief and Sorrow, than drastic Purgatives; by the Use of which several Patients have been taken off, in Consequence of an Inflammation of the Stomach, and a subsequent Cholera. Those who are subject to hæmorrhoidal Colics, and hypochondriac and hysteric Spasms, ought, also, carefully to abstain from drastic Purgatives, unless they are in Love with Pain, and fond of Misery. This Species of Medicine is, also, highly prejudicial to Children, especially when struggling with the Pangs of a difficult Dentition.

But however terrible the Consequences to be apprehended from the Use of Purgatives are, yet as Poison carefully and circumspectly exhibited becomes a Medicine, as is obvious from Mercurials, and antimonial Emetics, so there are, also, some, tho' very few Cases, where strong and drastic Cathartics are properly prescrib'd: In an *Anasarca*, for Instance, especially when it does not arise from an Induration, or a scirrhus State of the Viscera and Glands, but from a sudden Stagnation of Water, in Consequence of a Suppression of the menstrual or hæmorrhoidal Discharges, or from too great Voracity in or after a Disease. *Frederic Hoffman* says, he has seen a few Ounces of the Juice of common Flower de Luce, as also Gamboge, Elaterium, and Extract of *Esula*, successfully

cessfully exhibited with Half a Pint of Milk. The Dose may, also, be several times repeated, as the State of the Patient shall require; for by this Means, a surprizing Quantity of Water is not only discharged by the Anus, but also in Women sometimes from the Uterus; and these drastic Purges have sometimes evacuated only a small Quantity of Excrements, but excited a very copious and salutary Discharge of Urine; for hydropic Patients, in Consequence of the relaxed and torpid State of the intestinal Fibres, are the better able to bear these Purgatives, and these Fibres require a strong and powerful Stimulus, to excite and rouse them to their proper excretory Motions. These acrid and drastic Purgatives may, also, be properly prescribed in paralytic Resolutions of the Limbs, lethargic Disorders, and Cases where the languid State of the Patient requires an efficacious Medicine; as also in Madness, agreeable to which *Celsus* in the twelfth Chapter of his second Book informs us, that "black Hellebore is properly exhibited to those who abound with black Bile, who are melancholy mad, or whose Nerves are, in any Part of the Body, become paralytic." The above quoted *Hoffman* affirms, that he has found from Experience, that violent

Pains of the Os Ischium and Os Coccygis, which now and then affect the Thighs, have been relieved by drastic Purgatives, which by procuring seven or eight brisk Stools, have removed the Load of bilious and ill concocted Juices, which was the Cause of the Disorder.

Men of robust Constitutions, who live in the more northerly Climates, and use Aliments which are coarse and hard of Digestion, may, if Necessity requires it, have the drastic Purgatives exhibited to them; but the Dose must be very small, either in Powder in Conjunction with Salts, such as Cream of Tartar, or vitriolated Tartar, with an Addition of a few Grains of a diaphoretic Antimony. Or let the Extract of black Hellebore, Scammony, Resin of Jalap, or other Substances of the like Nature, be reduced into the Form of Pills, together with such Things as allay and correct their virulent Quality, such as Cinnabar, Vitriol of Mars, Saffron, Castor, Salt of Amber, Amber, and Myrrh. 'Tis however always to be remembered, that where a strong Evacuation is required, 'tis far more proper to excite it by an increased Dose of the more gentle Purgatives, than to force it by those which are highly acrid and virulent.

CHAP. III.

Of ALTERATIVES.

ALTERATIVES are principally employ'd in correcting Matter that is faulty as to Quality; but because the Matter to be corrected in Diseases may be faulty in different Respects, so it is plain that

there must be various Species of Alteratives adapted to the various Defects of the offending Matter. For Instance, if the Juices of a human Body, which in their natural State are benign, mild, and balsamic, should

should either acquire a *Salino-acid* and corrosive Quality, or assume a hot, subtle, sulphureous Intemperature, or become thick, viscid, and tenacious, or over acid and corrosive, in such an Instance Alteratives of different Kinds should be administer'd: that is, Absorbents for imbibing and blunting the Acid; temperating Medicines for dissolving and attenuating the thick and viscid Juices; and in fine, Demulcents for sheathing and mitigating the burning and corrosive Acrimony.

In the first Kind of Alteratives are included Absorbents, the principal of which are of marine Substances, as the Mother of Pearl, Cockle-shells, Oyster-shells, all the Species of Coral, red, and white, and the Bones of the Cuttle Fish; of Animals the Bones and Horns whether subjected to Boiling and softened by Evaporation, or burnt in an open Fire, the Teeth, the Claws and Eyes of Crabs, the Jaws of Fishes, the animal and fossile Unicorn; of subterraneous Substances, the *Lapis Specularis*, Chalk, prepar'd Crysal, *Osteocolla*, all Stones calcin'd and burn'd, and various Kinds of Boles, Clays, and sealed Earths; of Metals, the Filings of Steel; of Chymical Preparations, all Salts prepar'd by Incineration, *Cineres Clavellati*, Salt of Tartar, fixed Nitre, the urinous Spirit of Sal Ammoniac, volatile Sal Ammoniac, the *Magnesia Alba*, Tincture of Salt of Tartar, and of Antimony.

'Tis the Nature and Property of all these Absorbents, that they speedily incorporate with any Acid that falls in their Way, imbibe it, blunt, and destroy its corrosive Quality, and are along with it changed into a third, neutral, and inoffensive Body. This Effect is plain from the Example of extremely corrosive *Spiritus Nitri Fumans*; from Oil of Vitriol, sublimate Mercury, Aqua Regia,

Aqua Fortis, and other highly caustic Liquors, which, by the Addition of the Filings of Iron, the Mixture of an alkaline Salt, and an earthly absorbent Substance, loose the Whole of their acid and corroding Qualities; but altho' all saline and earthly Alcalies agree in this, that they subdue an Acid, and change it into a third Substance, yet there is this Difference between them, that alkaline and lixivious Salts are quickly and totally dissolv'd in the Body, not only by an acid, but likewise by any aqueous Fluid; whereas earthly Substances are not without Difficulty entirely dissolved, as is plain in Corals, Filings of Steel, and quick Lime, which are never thoroughly dissolv'd by an Acid, especially of the vegetable Kind, but always remain a Kind of fix'd earthly Substance; and which is still more, alkaline Salts, besides their absorbent Quality, after they have in a Manner embraced the Acid, acquire a new and additional medicinal Vertue, which is that of attenuating and colliquating the viscid, slimy, and tenacious Juices: they are, likewise, gently stimulating, and either open the Belly, or promote a Discharge by Urine, or even by Perspiration; and are, besides, attended with this Advantage, that they quickly pass thro' the excretory Ducts. But many other alkaline Substances instead of being calculated to quicken and forward the Secretions, rather prove astringent by their Effects, which is usually the Case with Filings of Steel, Corals, Boles, and sealed Earths.

Since, then, as earthly Alcalies are not dissolv'd but by an Acid, we ought to be cautious in exhibiting them in Disorders where the first Organs of Digestion, the Scene where Absorbents produce their principal Effects, are loaded with a Collection of crude and viscid Juices, lest they should adhere to them undissolved,

solved, and so oppress the Stomach, destroy the Appetite, and Digestion, and render the Belly more costive, as has sometimes happen'd in Fevers of the burning, bilious, and hectic Kind, which were attended with a Decay of the peristaltic Motion, or of the constrictory or retentive Force of the Stomach.

On the other Hand, because these Absorbents so readily destroy and consume the Acid, and because Acidity is what principally infringes and interferes with the Efficacy of Cathartics and Emetics, they are very usefully, where there is any just Suspicion of the Redundance of an Acid, prescribed before Vomiting and Purgings, by Way of Digestive. Tho' all earthly Substances absorb and blunt an Acid, yet upon Account of their different Natures and Textures, it sometimes happens, that they produce very different Effects, and such as are often contrary to the Intention of the Prescriber; 'tis therefore necessary we should be very cautious in our Choice of such as we design to use: When for Instance, a Physician desires, besides an absorbent Quality, a corroborative and astringent Virtue, marine Substances are chiefly proper for answering his Intention, such as Coral, Oyster-shells, the Shells of Eggs, and the various Species of Earths, or Marls, especially such as are call'd sealed Earths. If he desires a gentler Astringent, Mother of Pearl, and Shells best answer his Intention; and if a Flux of the seminal Matter is to be restrain'd, the Bones of the Cuttle Fish are peculiarly proper for that Purpose. When by Absorbents a laxative Effect is, at the same Time, to be produc'd, the Magnesia Alba duly prepared of a Lixivium of Nitre, is to be administer'd, which being entirely dissolv'd by an Acid, is chang'd into a bitter Salt, of a middle Nature, which occasions a speedy Discharge of the Ex-

crements; for this Reason 'tis of singular Efficacy in hypochondriacal Cases, and when the first Organs of Digestion abound with acid Juices; or when the Belly is costive. When the Effects of diuretic Medicines are to be produced by Absorbents, the Claws and Eyes of Crabs, Shells, or Coral calcin'd, and Osteocolla, are in that Case most efficacious. For procuring a free and plentiful Perspiration in any Disease, the Bones of Animals burned and philosophically prepared, are of all other Medicines the best calculated, and most effectual; and, in fine, for resolving the stagnating and condensed Humours, and the Blood itself when coagulated, nothing is more proper than a Medicine, which consists of the Eyes of Crabs dissolved in Vinegar.

Tho' absorbent Medicines are very simple, and generally speaking very easily prepared, yet their Virtues and Efficacies are almost superior to those of all others, nor can they be sufficiently commended; for none of all the Tribe of Alteratives are endowed with such a Power of speedily subduing the bad Qualities of noxious Juices; nor are any of them so safe and innocent as Absorbents, where not used to Excess. Add to this, that the Body is very subject to be affected by an Acid, especially in those whose Bile is deficient, such as Women, and old Men, those who lead a sedentary Life, or drink freely of Liquors abounding with an Acid; and in many Disorders, especially those of the melancholic and hypochondriacal Kind, the Quantity of Acid in the Body is scarcely credible: But Acids by their coagulating Quality, are hurtful to the human Constitution, obstruct the Circulation of the vital Juices, and lay too sure a Foundation for very terrible Disorders, especially of the chronical Kind. 'Tis therefore evident, that

Absorbents are endowed with singular Virtues, and accommodated to a great Number of Diseases; but they were very sparingly used by the Ancients, and only brought into Credit by *Helmont* and *Tachenius*, and their two Followers in *Holland*, *Sylvius* and *Bontekoe*, who assigned an Acid as the Cause of many Diseases, and prescribed *Absorbents* for their Cure.

The second Class of Alteratives comprehends those Medicines which are of a lenient and temperating Quality, such as check the hot intestine Motion of the sulphureous Particles of the Blood, and qualify, subdue, and cool the scorching hot and bilious Humours in the Intestines themselves. Of Vegetables, the principal of this Kind are, the Root and Herb of Sorrel, Wood-Sorrel, Citrons, Oranges, China Oranges, Pomegranates, Strawberries, Barberries, Cherries, and the Juices of them prepared, and likewise Syrops and Water distilled from these; add to these the four greater cold Seeds, and Decoctions of Oats, Whey, Batter-Bilk, the Juice of Craw Fish, a Decoction of Tortoises, thin Decoctions of the Shavings of Harts-horn, and Vipers Grats, with or without Barley, Jellies of Harts-horn, and Water distilled from the Shavings of Harts-horn. Of the mineral Tribe, well purified Nitre is the best and most efficacious, and becomes still better if restored from *Aqua Fortis*, to its former State, by the Addition of Salt of Tartar. Of chymical Preparations, the essential Salt of Wood Sorrel, Cream of Tartar, Phlegm of Vitriol, Tinctures of Roses, Daisy Flowers, and Violets, prepared with Spirit of Vitriol, are good temperating Medicines.

Temperating Medicines act in three several Manners, for they either by their acid Salts bind up the volatile sulphureous Particles, and by fixing

and coagulating them, lessen in some Measure their Intestine and gyratory Motions; or they operate by an expansive and aërio-lastic Quality, such as that which is inherent to Nitre, which consisting of an acid and alkaline Salt, contains great Store of sulphureous Particles, and also, of a subtile aërio etherial Fluid, by Means of which it dispels the hot Matter whilst in a gyratory Motion, and forces it, as it were, from the Center to the Circumference; by its neutral Salt attenuates, dissolves, and separates the viscid Matter, which is the Matrix of Heat, and Sulphur, and at the same Time by its subtile Acid, retards the accelerated Motion of the sulphureous Parts; or, in the last Place, they restore, the Moisture consumed by the Heat, by diluting and dissolving the sulphureous Parts, and at the same time lessens the too great Elasticity of the Vessels, upon which the Heat in a great Measure depends, as is observable in the Use of Watery Liquors, Whey, Decoctions of Harts-horn, and of Oats.

These temperating and qualifying Medicines are of great Use in Physic, wherever a preternatural Heat is to be extinguished, and therefore cannot be wanted in Fevers of all Kinds, Inflammations, Spasms and grievous Pains, which almost always are occasioned by too great a Commotion of the Blood. But nitrous Preparations are deservedly to be preferred to Acids, for Nitre is not only cooling, but Antispasmodic, and relaxes the Rigidity of the Parts; it, in like Manner, promotes the Discharge by Urine, and Stool; besides, as those cooling and acid Fluids condense and coagulate, and as Nitre rather colloquates, rarifies, and attenuates thick and viscid Humours, so when sprinkled either in Powder, or dissolved in Water, upon black coagulated Blood, it renders it more florid:

rid. For this Reason, Nitre is not only preferable to Acids in Inflammations, and even in inflammatory Fevers, which arise from a black coagulated pent up Blood, but is likewise a noble and efficacious Preservative against Inflammations; because it effectually fuses and dissolves the viscid Serum, which is easily to be observed in the Blood of those who are subject to Inflammations.

In chronical Fevers, such as those of the slow and hectic Kind, which for the most Part owe their Origin to a Defect or Putrefaction in some of the Viscera, and when a Cough or Spitting of Blood is joined with them, or when the Lungs themselves are faulty, not Acids but nitrous and diluting Remedies, especially such as are taken from the animal Kingdom are to be used, such as, Whey, the Decoction and Jelly of Harts horn. When, also, a feverish Heat accompanies Diarrhœas, Dysenteries, or a Cholera Morbus, cooling Acids are to be abstained from, and diluting, gelatinous, and mucilaginous Medicines, and temperating and absorbing Powders, with the Addition of a Grain or two of Nitre, are to be used.

In the third Class of Alteratives, are comprehended inciding and attenuating Medicines, among which may be reckoned, the Roots of white Burnet, Dragons, Sweet Flag, Asarabacca, wild Radish, Elecampane, Succory, Florentine Orris, Salomons Seal, Swallow Wort, the Herbs Leopards Bane, Brook Lime, Scurvy Grass, Water Cresses, and Indian Cresses, Dittander, Rosa Solis, Fumitory, Buck Bean, the lesser Centaury, Hyssop, Germander, Chervil, Carduus Benedictus, lesser House-leek, the several Species of Garlick, Leeks, and Onions, Guaiacum Wood, and its Bark, the Spices, Pepper, and Ginger, the Seeds of Mustard, Scurvy Grass, and Water Cresses, the

Gums Amoniacum, Galbanum, Sagapenum, Opopanax, Myrrh, Benzoin; of chymical Preparations, Mercurius Dulcis, Æthiops mineral, Flowers of Sulphur, fixed alkaline Salts of Vegteables reduced to Ashes, especially Salt of Tartar, and of Wormwood; also neutral Salts, as Sal-ammoniac, Sal-polychrestum, Epsom Salt, vitriolated Tartar, Terra foliata Tartari, Arcanum Duplicatum, a Solution of Crabs Eyes, of Nitre and Sal-ammoniac; Volatiles, as volatile Sal-ammoniac, urinous Spirit of Sal-ammoniac, and Oxymer of Squills, acrid Tincture of Acrimony, Essence of Gum-ammoniac, and of Indian Pepper, Resin of Guaiacum; Syrup of Tobacco, of Hedge Mustard, Fæcula of Arum; and medicinal Waters, also, which besides their diluting and opening Virtue, are possessed of an attenuating and inciting Quality; as also, Infusions in the Form of Tea, which by their great Store of an aqueous Element, exert their Virtues, disjoin the coalescent Globules; and lastly, sweet Whey, which on Account of the sweet and subtile Salt it contains, is deterfive, and opens the excretory Ducts.

Of these, some act upon the fluid, and others upon the solid Parts of the Body; those which affect the Fluids by immediate Contact, are very few in Number, and those either consist of aqueous Diluters, which are very efficacious for fusing the glutinous and viscid Juices, or of alkaline fixed and volatile Salts, and nitrous Salts, which when mixed, especially in an liquid Form, with thick and coagulated Blood and Humours, liquify and attenuate them in such a Manner, as even to be perceptible to the Eye. All the rest operate upon the Solids by augmenting their Tone, their Strength, and contractile Force, and by adding to the elastic Powers of the Vessels,

fels, by which Means they strongly press and agitate the contained Juices, accelerate their progressive and intestine Motions, and forcibly and frequently propelling them thro' the capillary Vessels, divide and disjoin the viscid Juices into small Globules, upon which Fluidity depends. This Action upon the Solids, is in some Medicines perform'd by a fix'd acrid Salt, as in the Roots of Arum, white Burnet, Asarabacca, Florentine Orris, Solomons Seal, the Herbs German Leopards Bane, Ditander, Rosa Solis, Pepper, and Ginger, which are indeed of an acrid Smell, but being distilled with Water by an Alembic, neither yield a volatile acrid Oil, nor a Water of an acrid Taste, which is a sufficient Proof, that they are of a fix'd Nature. Other Medicines, again, produce their Effects by an acrid, subtil, and volatile Salt, such as wild Radish, Elecampane, Water Cresses, Scurvy Grass, Mustard, and all Kinds of Onions, Garlick, and Leeks. Some act by their stimulating neutral Salts, of which Kind are those Salts whose Acrimony and irritating Quality, are not only discoverable by their Taste, but by their Effects, for which Reason when exhibited in large Doses, they open the Belly and prove diuretic. Others produce their Effects by an acrid Salt, which contains many sulphureous Particles, as is obvious in Gum Ammoniac, Sagapenum, Opopanax, Guaiacum, and its Resin, which besides their acrid Salt, contain an Oil, which upon Distillation they yield in Abundance. Lastly, Some Medicines perform their Work, by a penetrating, subtil, and metallic Salt, as Mercury, and especially Mercurius Dulcis, and Æthiops Mineral.

The Virtues of attenuating and inciding Medicines are so extensive, that, on Account of the great Variety of their Effects, they are usu-

ally ranged under different Denominations; for when tenacious viscid Humours not only stagnate in the Cavities of the Vessels, but stuff up and obstruct the small Tubes of the Intestines and Emunctories, these Medicines, by their inciding and attenuating Quality, disengage the impacted Humours, remove the Obstructions, and may, for that Reason, be called Aperients, since they produce the same Effect; they also deserve the Name of Anti-Scorbutics, and Purifiers of the Blood; for since the Purity and good State of the animal Juices, depend upon the due Secretion and Excretion of superfluous and recrementitious Matter, and since Secretion and Excretion cannot be carried on, if the small Canals of the Glands and Emunctories are block'd up by viscid and tenacious Humours, 'tis therefore plain, that those Medicines which are endowed with a Power of inciding viscid Juices, and removing Obstructions, must not only be Purifiers of the Blood, but also Preservatives against the Scurvy, in which the Juices are of a bad Quality, and loaded with various heterogeneous, viscid, salt, sulphureous, and sharp Particles. Now since attenuating Medicines produce so different Effects, the Physician ought to know, what particular Attenuants are best adapted to particular given Cases.

In Disorders of the Stomach, and first Organs of Digestion, for inciding and attenuating viscid Humours, the following Medicines are excellently calculated: The Root of Arum, of white Burnet, and of Calamus Aromaticus, Pepper, Ginger, purified Sal Ammoniac, vitriolated Tartar, Arcanum Duplicatum, Salt of Wormwood, Spirit of Salt, simple or dulcified; and if crude and ill concocted Juices are to be evacuated by Way of Excrement, the neutral Salts are preferable, especially

specially the Sal Polychrestum, and the Epsom Salts taken in large Doses, and drank in a sufficient Quantity of some aqueous Vehicle.

In Disorders of the Breast, when viscid Humours are to be attenuated and thrown up by Spitting, the most effectual are the Roots of Elecampane, and of the Florentine Iris, Rosa Solis, Hyssop, Germander, Maidenhair, Gum Ammoniac, Myrrh, Benzoin, Sulphur, Balsam of Peru, Terra foliata Tartari, Oxymel of Squills, Solution of Crabs Eyes in distill'd Vinegar, and Syrup of Hedge Mustard.

When the Blood is tainted with any thick tenacious Impurity, and by that Means the Embuories are clogged and the Humours polluted by a salt, sulphureous, and scorbutic Dyscrasy, the Medicines chiefly in Use in that Case are, the wild Radish Root, Garden Scurvy Grass, Water Cresses, Indian Cresses, Dittander, Brook Lime, the lesser Centaury, Marsh Trefoil, Carduus Benedictus, Fumitory, the Smaller House Leek, Mustard, Gum Ammoniac, Sagapenum, Myrrh, the Liquor of fix'd Nitre, Oil of Tartar *per Deliquium*, the Solution of Nitre, Tincture of Antimony, the Essences of the Woods, Spirit of Sal Ammoniac, Salt of Wormwood with Lemon Juice, and some Sorts of medicinal Waters.

When grumous Blood occasioned by Contusions, Blows, or Suffusions, is to be dissolved and fus'd, the Medicines most to be commended in this Case is, Solomon's Seal, German Leopard's Bane, Chervil, Vinegar neutraliz'd with Crabs Eyes, Terra foliata Tartari, and antimoniated Nitre.

In Diseases where the Lymph is become thick, especially from a venereal Taint, the principal and most efficacious are, Guaiacum, Sopewort, *Mercurius dulcis*, and *Æthiops Mine-*

ral, which if prudently used, is of uncommon Efficacy, for colliquating and resolving the viscid Humours lodged in the Glands and Liver.

I come now to the fourth and last Class of Alteratives, which comprehends the emollient and softening Medicines, of which the chief are, Roots of Marsh Mallows, of white Lillies, of Liquorice, and of Vipers Grass, the five emollient Herbs, Lettice, Bears Breech, Pellitory of the Wall, the Flowers of Elder, of Mellilot, of Mallows, of Mullein, of Yarrow, of Camomile, of white Lillies, of Borrage, of the wild Poppy, of the Lime Tree, of the Egyptian Thorn, of Violets, and most of all Saffron; the Seeds of Flax, of Fenugreek, of Anise, of Quinces, of Flea Bane, of white Poppies, the four greater and lesser cold Seeds, sweet Almonds, Figs, Pine Nuts, Pistaches, Cherry Tree Gum, Gum Arabic, Gum Tragacanth, Shavings and Jelly of Harts-horn, human Grease, that of a Dog, of a Capon, the Marrow of their Bones, the Fat about their Omentum, Bones, and Mysentery; the native Oils of Animals, fresh Butter, Cream, Milk, Crystals of Milk, Sperma Ceti, Honey, the Yolk of an Egg, and its White dried and reduced to Powder. Of prepared Medicines, Oil of sweet Almonds, Linseed Oil, Rape Oil, Oil of the Male Balsam Tree, Decoctions of Harts-horn, and Vipers Grass, mix'd with the Juice of Citrons, the common Pilsan, sweet Whey, *Fernelius's* Syrup of Marsh Mallows, Ointment of Marsh Mallows, simple Diachylon Plaster, that of Melilot, and that of Frogs Spawn.

The Virtues of these Medicines is twofold; the one appropriated to the Solids, the other to the Fluids, in the Solids they relax, soften, and render moveable the hard, stiff, and tense Fibres, and at the same Time

enlarge and dilate the Channels of the small contracted Vessels; but in the Fluids they, by their viscid Mucilage, bind up, involve, and as it were, inclose in a Sheath the piercing Points of the sharp corroding Salts, and by that Means prove excellent lenitive Medicines, and when externally applied, they convert into a laudable Pus, any Collection of extravasated Humour, which cannot be resolved, or taken into the resluent Mass by the lymphatic Vessels; so that having by their moderate Warmth, dissipated the most subtle Part of the extravasated Humour, the remaining viscous Matter is happily disposed to mature, the Pores being now gently closed up, lest too much Moisture should be exhaled, and the nutritious Juice, of which Pus chiefly consists, being excited to flow more plentifully thro' the small relaxed Tubes.

These lenitive Medicines are of incredible Efficacy, if any one has the Misfortune to take a caustic Poison, and scarce can more powerful Antidotes than these be used, for checking and subduing the Virulence of vegetable and animal Poisons, especially if Abundance of Milk, and oily Liquors, are used as their Vehicles; because these not only sheath up and blunt the sharp Points of the Poison, but, also, relax the Membranes contracted and render'd subject to Spasms, by the violent Shocks of the Poison; and by these Means they always promote the Evacuation of Poisons, either by Vomit, or by Stool.

In long and violent Distempers, especially such as arise from an Acrimony of Humours, and which prey upon the Nerves, Infusions, and Decoctions of these emollient Medicines are of singular Advantage; thus Convulsions, attended with Madness, scorbutic Contractions of the Joints, and intolerable

Gripes of the Belly, are often cur'd by Decoctions of Piony Roots, Marsh-Mallows, Pellitory of the Wall, Bears Breech, Flowers of Mullein, of white Lillies, of Elder, of Borage, of Camomile, and wild Poppy, and by Figs and Fennel Seed, prepared with Water, or Whey; but, they are to be us'd in large Quantities, and for a long Time, with the Addition now and then of a Spoonful or two of Oil of sweet Almonds, sometimes bathing in fresh Water with Milk.

Fresh Fat and Grease of Animals, especially the Marrow of Bones, which abounds with a very subtle Oil, are us'd internally with Success, in a sharp scorbutic Disposition of the Humours.

In a Dryness of the Parts, and when the Joints can scarce move without making a Noise, and in arthritic Pains, these emollient Medicines produce wonderful Effects, but these fat Substances are to be used when the Stomach is empty, and not in large, but frequent Doses, drinking some suitable warm Draught after them.

In Exulcerations of the Kidnies, and Discharges of bloody Urine, which sometimes happen in the Small Pox, on Account of the Acrimony of the Humours, Cherry Tree Gum, or even Tragacanth, or the dried White of an Egg dissolv'd in Whey, are of singular Use: But in Disorders of the Breaſt, for blunting the Acrimony, which is the Cause of the Cough, and disposing the Matter for Expectoration, the following Medicines are excellently calculated: Decoction of Oats, Sperma Ceti, Liquorice, the Oil of sweet Almonds, Saffron, Figs, Syrup of Violets, and Flowers of Poppy, and Elder.

In continual hectic Heats, and if the sweet Juices, by a continued slow Fever, acquire a saltish alkaline Acrimony,

crimony, Cream and new Butter, on Account of their demulcent Qualities, are found to produce excellent Effects.

In a Cholera Morbus, also, in a Dysentery, a Scurvy, or scorbutic Decay, a Consumption, and in general, where-ever the Acrimony of the Humours gives Rise to the Disease, gelatinous Decoctions of Flesh, of Bones, and especially of Harts-horn, Calves Feet, and Sheeps Feet, are of singular Efficacy and Advantage, as well used internally by Way of Drink, as injected by Way of Clyster.

When the Intestines are violently contracted, and the Excrements pent up by Flatulencies, emollient demulcent Medicines, such as Oil of sweet Almonds, Whey, Decoctions of Oats, and Hartshorn, produce very great Effects; but should rather be injected by Way of Clyster, than taken by the Mouth.

Emollient Flowers and Herbs, if boil'd with a small Quantity of Saffron, inclosed in a Bladder, and externally applied over the internal Part affected, procure almost incre-

dible Ease and Relief, as may be experienc'd in a Pleurisy, an Inflammation of the Liver, a Cholic, or when the Anus suffers by the blind Hæmorrhoids.

When any extravass'd and impacted Humour, is to be converted into Pus, no Applications can be more properly us'd than Liniments and Cataplasms, made of emollient Fats and Milk; but especially of the Flowers and Leaves of white Lillies, Saffron, Figs, roasted Onions, Bean Meal, Yolks of Eggs, and Honey; but these are not to be us'd, when the Matter is contain'd in hardened and scirrhus Parts, where it cannot be converted into Pus, unless we are inclin'd to bring on a fatal Putrefaction.

Mucilages made of the Seeds of Quinces, and Flea Bane, with Rose Water, or Frogs Spawn Water, often afford immediate Relief, in excoriated and exulcerated Parts, attended with Heat and Pain, such as the ulcerated Aphthæ in the Mouth, blind and painful Hæmorrhoids, a Tenesmus, Gonorrhæas, or a corroding Fluor Albus.

CHAP. IV.

Of ANODYNES.

SOPORIFICS, if they are of a potent Nature, take the Name of *Narcotics* or *Stupefactive*s, and are such Kind of Remedies, as by their subtle, noxious, deleterious Exhalations, diminish, or quite destroy, the Sense and Motion of the solid Parts. Among *Soporifics*, the most eminent are those which are usually prepared for medicinal Uses, of the whole Poppy, as *Opium*, which by the Antients was called

Lacryma Papaveris, the Tear of the Poppy, and *Meconium*, which is the Extract of the Poppy made by Boiling. In the Class of *Stupefactive*s, which are of a violent Nature, are all such Remedies as are prepared of the *Mandragoras*, *Hyscymus*, *Stramonium*, and *Datura*. *Stupefactive*s and *Soporifics* are, not without good Reason, reckon'd amongst Poisons, since they exert their noxious Influence in a

short Space of Time, when taken in a small Quantity and a Quantity a little larger than ordinary, proves mortal; besides, their principal Operation is on the noblest Parts of the Body, which are the Origins of Sense and Motion, and, moreover, they act by Means of an Element quite opposite to Nature, a noisome sulphureous Vapour, by which they diminish to a considerable Degree, or quite destroy, the Sense and Motion of the motive Fibres.

The Operation of stupefactive Poisons is directly opposite to that of Caustics, these latter with their highly acrimonious, and penetrating Salts, excite preternatural and violent Motions; the other by their sulphureous Vapour, retard or stop those Motions and Sensations, which principally belong to the nervous Membranes, and by that Means render the Circulation of the Blood more languid, and the Excretions slower and more imperfect.

The Life of the human Body, and the Integrity of its Functions, consists in the due Tone of the Solids, and the free and equable Motion of the Fluids: The first depends on their moderate and equable Systole and Diastole, or their Contraction and Dilatation; the other in a proper Temperament, Quantity, and Ventilation of the Blood. Whatever, therefore, in a speedy and effectual Manner destroys that due Tone of the Solids, and disturbs the equable Motion of the Fluids, is naturally qualified to subvert all the Functions of the animated Body, and if it works such an Effect in a violent Manner, it may be justly called Poison; and when *Soporifics* and *Narcotics* in too great a Measure diminish the Motion, and injure the Tone of the solid Parts, or render the Circulation of the Blood more languid and imperfect, they are highly destructive to Nature.

We are assured by undoubted Experience, that the Effects of *Opiats* and *Narcotics*, especially when taken in an immoderate Quantity, are a weak, low, and small Pulse, a Straitness, and Difficulty of Breathing, a soporous Indisposition, and Heaviness of the Head, a Dullness of the Senses, and oftentimes a Deliriousness, attended with a Diminution of Appetite, Costiveness, a Defect in Digestion, and a remarkable Decay of Strength. All these Symptoms proceed from no other Cause, than a too slow Progress or Stagnation of the Blood and Fluids; for since the Motion of the Fluids depends only on the Tone, Strength, and systolic and diastolic Motions of the solid Parts, it plainly appears, that the animal Spirit, that Fluid of the Brain, which directs and regulates the Motion of all the other Fluids, is primarily and preternaturally affected by these Remedies.

The Elements by which *Narcotics* operate, are of an highly volatile, and penetrating Nature, since they so deeply insinuate themselves, like a Vapour, into the Pores of the Membranes and Nerves, and by contaminating that most pure and moveable Fluid, deprive, by little and little, the Solids of their Tone and Motion.

That the Elements by which *Narcotics* exert their Force are extremely volatile and penetrating, may be proved by several Arguments: First, Their Virulence is almost entirely destroyed by long and vehement Boiling. Secondly, If they are applied in Ointment or Epithems to the Head, or other nervous Parts, as the Soles of the Feet, the Palms of the Hands, or only received by Way of Smell, they induce a Sleepiness. *Dioscorides* affirms Opium to be soporiferous by Smell alone. And *Plutarch* in his *Symposiasts* relates, that the Vapours proceeding

ceeding from the Poppy have, for Want of due Caution, proved fatal to those who have gathered the Juice. And Thirdly, It is found by manifold Chymical Experiments, that there are no better *Correctives* of their Virulence than *Acids*, such as the Juice of Quinces or Citrons, Wine Vinegar, or Spirit of Vitriol, which have a great Influence in fixing the volatile Sulphur; and Opium is well known to lose its Virtue by being roasted on an heated Plate. All *Narcotics* and *Hypnotics* exhale a strong and malignant Kind of Vapour, as we are assured by the Smell, which is a manifest Indication of an ungrateful Sulphur contained in them.

Narcotics act on the nervous Membranes of the Stomach and Intestines, principally by Means of a vaporous and fetid Sulphur. For as the Stomach and Intestines first and immediately feel the Force and Efficacy of Remedies, they are so much more liable to suffer from the Influence of Medicines, which are of a stronger and more penetrating Nature than ordinary. *Opium* or any other Narcotic, after it is taken, and begins to be dissolved by the internal Heat and Moisture, diffuses its noxious Vapours, which being received into the Pores of the nervous Membranes, the Fluid on which their Tone and Motion depends, loses its Nature: Hence the Sensation, and, also, the peristaltic Motion of the Intestines become more languid; for if a strong Smell, as in the Case of Hysterics, are received up the Nostrils, such, for Instance, as proceeds from burnt Feathers, or Asa Fetida, has so sudden an Effect in composing the turbulent and disorderly Motions in the nervous and membraneous System, and if, on the contrary, a fragrant Vapour has the Force of immediately disturbing the whole Frame

of the Muscles by violent Spasms, why may not the foul and noisome Exhalations of *Narcotics*, by contaminating a Fluid of consummate Activity, as well injure or put a Stop to its Motion? But those Things which act on the Nerves, are most speedy in their Effects, because their Influence is immediately diffused over the whole nervous System. An Opiate as soon as taken, or before it is out of the Stomach, very soon causes an Inclination to Sleep, and Relief from Pain in distant Parts; and Opiates, most of all, exert their Influence on the Nerves, by Virtue of which, those wracking Pains which are incident to the Intestines, are remitted in a Moment, being succeeded by a Nausea, Loathing of Food, and, if there be sufficient Strength, by Vomiting.

Narcotics have, also, a considerable Influence on the Membranes of the Brain, where, by gently diminishing the Spring and Syctole of the Arteries, which are furnish'd with very thin Membranes, they cause a Stagnation of the Blood therein, with Distensions of the Vessels of the Head, by which Means they induce a Torpor, Drowsiness, Deliriousness, with frightful and troublesome Dreams.

There is nothing in the Nature of Things that will render a wise and intelligent Person a Fool, and stupid, so soon as a *Narcotic*. That the *Datura* has such an Effect is well known, and that the *Solanum Furiosum*, and its Berries, will suddenly render a Man of Sense a Maniac, is confirm'd by many Observations in *Matthioli Comment. in Dioscorid. Wierius de Præstigio, Mercurialis de Venenis, and Lobelius in Adversariis Stirpium*. To these we may add the following Observation of *Frederic Hoffman*: A certain Person labouring under an Hæmoptoe, having, thro' Want of Care, taken too large

large a Dose of a Medicine containing a good Quantity of the Seeds of Henbane, was deprived of all Sense and Memory, and continued waking for some Days. And something like this happen'd from Pills of Houndstongue given in too large a Dose to repress Vomiting. Even an external Application of Hensbane may procure Madness, as *Platerus* assures us on the Testimony of *Rondelilius*; and the pernicious Effects of these Kind of Remedies were not unknown to the Ancients. Hence *Calius Aurelianus*, *Lib. I. Cap. 4.* says, "They soon become delirious, who take the *Papaver*, *Mandragoras*, or *Hyoscyamus* inwardly; but their Pulse at such Time is very slow." and *Helmont*, *Lib. I. de Lithiasi*, says very justly of Opium, "That they are guilty of a very great Error, who endeavour to cure a Mania with Opiates, since every Opiate is mad in itself." And in another Place, "Narcotics will hardly procure Sleep to mad Persons, tho' given in a quadruple Dose, but will increase the Madness." To this Purport also is, *Obs. 78. Dec. 11. M. Naturæ Curiosorum*, of a Person labouring under a Dysentery, who was made delirious with a Clyster of a Pint of a Decoction of *Hyoscyamus*, and continued in that State for six Weeks.

Narcotics or stupefactive Remedies, were always very much suspected by the wisest Physicians amongst the Ancients in the Cure of Diseases, on Account of their delirious Quality. For a Proof hereof, we shall give a few Testimonies selected from innumerable others. *Galen* was very fearful of exhibiting Opium, and *Lib. III. de Medicam. Compos.* *Cap. 10.* he says, "That living Bodies suffer something like Mortification, from the Use of every Remedy composed of

"Opium, *Hyoscyamus*, and *Mandragoras*." And *Celsus*, *Lib. III. Cap. 18.* pronounces, "That if Sleep must be procured by Medicines, Moderation is necessary in exhibiting them, lest we should never be able to rouse the Person from the Sleep into which we have cast him." And *Lib. V. Cap. 25.* he says, "To use Anodynes without urgent Necessity, is a wrong Step, for they are a violent Kind of Medicine, and injurious to the Stomach." But the Effects are worse which *Scribonius Largus Compos. 106. Cap. 48.* enumerates. "Opium, says he, taken, induces Heaviness of the Head, Refrigeration and Lividness of the Limbs, and cold Sweats, besides a Difficulty of Respiration, Stupidity, and Loss of Reason." *Trallian*, *Lib. III. Cap. 5.* writes, that a certain Person by the sole Use of Opium, had lost his Voice and Senses in such a Manner, that he could never afterwards be recovered. Nor must we omit *Aetius*, who very well describes the pernicious Effects of Opiates in the following Manner: "Opiates, says he, never cure the Disease themselves, on which the Pains attend, but by inducing a Stupor, and Dullness of Sensation on the Parts, procure a Kind of Rest to the Pains," and in another Place, to the same Purpose, he says, that "They cause, indeed, an immediate Cessation of the Pain, but protract the Cause thereof, and in a little Time afterwards induce Faintings and Death, or long and incurable Disorders." And to speak the Truth, so sudden and pernicious have been the Effects which Physicians of all Ages have recorded from the Use of Narcotics, that they are by no Means to pass unregarded, but to be esteem'd as an

Evidence of some very active and latent Principle, which has Power to hurt; for which Reason Physicians ought to be careful and circumspect in the Use of these Kinds of Remedies.

Tho' much Mischief and Danger may attend the Effects of Narcotics, so that they may be esteemed not far removed from the Nature of Poisons, Physicians, however, both ancient and modern, have at all times experienced great Benefit from hypnotic Anodynes, especially in violent Pains and Fluxes; for what greater Benefit can we receive, than to be delivered from intolerable Pains? Besides such is the Nature of Pain, that if it be of any long Continuance, it either weakens the Powers of the Mind and Body, to such a Degree, as to render a Disease, otherwise favourable, evidently mortal, or else brings Death itself. Whoever, therefore, shall be so happy as to know how to remove these Pains, and avert so great Dangers, most certainly confers an extraordinary Benefit, and administers, I had almost said, divine Consolation to the miserable Patient; and therefore if we consult the most antient Compositions, of which *Scribonius Largus* has principally made a Collection, or *Celsus*, we shall find many Prescriptions against Pains and Fluxes, of which Opium is commonly the Basis. Thus the *Theriaca Andromachi*, *Mithridate*, and *Philonium*, with an infinite Number of modern Preparations, enough to fill a Volume with their bare Titles, are but Corrections of Opium, and Compositions which have for their Basis Opium, celebrated by some as an universal Remedy; and some endeavour to extract a Panacea from it. It were indeed heartily to be wished, that some eminent Physicians had not been so profuse in their Encomiums on this Remedy, since none has been so freely, and with

Impunity, abused to the Destruction of Mankind, especially in our Times, on which Subject, *Stbal de Imposituris Opii* deserves to be consulted. I cannot avoid taking the Opportunity here to remark, that there is a Custom too prevalent in our Times, when we would repress an Hæmorrhage, or alleviate a Pain, of exhibiting Pills of Hounds-tongue, which having a Mixture of Opium, and the Seeds of Henbane, and often leaving behind them an extraordinary Stupor of the Head, ought to be used with the greatest Caution, and never but when milder Remedies will not answer the Intention, nor then, if the Body be very weak.

In Disorders of the Stomach and Intestines, all Things which induce a Stupor, are very cautiously, or never at all, to be exhibited; because no Kind of Medicine is so pernicious, and injurious to the Tone and Motion of the nervous Parts.

To preserve Health, and prevent Diseases, nothing is so effectual, as to maintain the Tone, Strength, and Motion of what they call the *Primæ Viæ*, or first Passages; because the most salutary Excretion which is performed by Stool, and discharges the Sordes, which are the Recrements remaining after Digestion, or are collected from all Parts of the Body, depend chiefly thereon. Where this Evacuation is suppressed, or else performed after a slow and remiss Manner, a Deluge of vicious Humors is soon collected, and becomes the Cause as well as Fomentor of Diseases. Now there is nothing which so effectually diminishes the peristaltic Motion of the Intestines, and suppresses the intestinal Excretion, as *Sedatives* and *Anodynes*, the Truth of which is attested by Experience: For as all Remedies, so especially those which are of a violent Quality, exert their Efficacy

ficacy first and principally upon the Stomach and Intestines.

It is very dangerous to administer Opiates and Anodynes, where the Stomach and Intestines are inclining to an Inflammation and Sphacelus, or where an extraordinary Impurity disposes them to Corruption.

That a firm Rest and Stagnation of the Blood in the Vessels, which are productive of an Inflammation, will end in a sphacelous Putrefaction, unless seasonably discussed, is not to be questioned. Whenever, therefore, these Parts, I mean the Stomach and Intestines, labour under violent Pains and Spasms, and the Body is infirm or impure, an Inflammation is justly to be apprehended. 'Tis, therefore, the Business of every prudent Physician, in a Dysentery, an iliac Passion, a spasmodic Cholic, and a violent Cardialgia, diligently to consider, not only the Strength of the Patient, but also the various Stages of the Distemper, and the Disposition of the Humours, before he exhibits Medicines of a sedate Quality; otherwise instead of affording seasonable Relief, he procures the Death of the Patient. Thus some of the best Authors inform us, that mortal Symptoms have forthwith been produced by Opiates taken internally, or injected by Way of Clyster. Instances of this Kind occur, in *Bonnetus in Observat. Lib. 3. Cap. 5.* *Waldschmidtus in Dissert. de Noxia Opiat.* *Tillingius de Opio. Sennertus Lib. 6, Praxeos. P. 3. Cap. 1.* and *Marcellus Donatus in Hist. Med. Mirabil.*

Since Medicines of the sedative and stupifying Quality, so effectually destroy, and impair the Strength of the Intestines, hence it is obvious, that nothing has a more effectual Tendency both to produce and cherish hypochondriac Disorders, than

a frequent Use of such Medicines. That the hypochondriac Disorder arises from continual Inflations and Spasms of the Stomach and Intestines, which are of a nervous Nature, and that it is the Effect of the Suppression of the Discharge by Stool, and the large Congestion of peccant Humours arising from that Circumstance, are Things so certain, that they cannot be doubted of. Since, therefore, Medicines of this Kind, by producing Costiveness, weaken the Strength and Force of the Intestines, hence nothing can be more prejudicial in this Disorder, and it is frequently observed, that the immoderate Use of Opiates and Astringents in checking Diarrhæas, Dysenteries, and intermittent Fevers, has produced a violent hypochondriac Disorder, or in Women *Hysterics*, which generally afflicted the Patient during the remaining Part of Life: And if a Physician, by the frequent Use of Anodynes, checks the Pain, and other Symptoms accompanying the Disorder, he by that Means alleviates them for a Time, but lays a Foundation for their recurring with greater Violence.

Sedative Medicines, especially those of the somniferous and stupifying Kind, are, also, injurious to the Head, and increase the Disorders incident to it; because by rendering the Motion and Pulsation of the carotid Arteries, which consist of tender Coats, more languid, they occasion a slow Circulation of the Blood through the Head. Hence the Stagnations of Blood there produced, generate formidable Disorders. In order to keep the Head free from Diseases, it is of the last Importance to preserve the Tone of the Membranes of the Brain, and the due Circulation of its Blood thro' its Vessels. Now nothing is more injurious to the nervous Coats
of

of the Brain, than all Vapours, fetid, and strong smelling Substances, by their Means, since their Strength and Tone is diminished, the systolic and elastic Force of the small Arteries impaired, and consequently the Circulation of the Blood thro' the Head render'd slower: and this slow Circulation is succeeded by a Secretion of theserous Humour, which lays a Foundation for the most considerable Disorders of the Head, such as Palsey, an Abolition of Memory, an Aphony, Difficulty of Hearing, lethargic Disorders, Hemiplegies, and fixed Pains; or in Consequence of the too great Distention of the Vessels of the Brain, by the infracted Blood, Melancholy, which is frequently accompanied with a palpable Depravation of the Fancy, an imaginary Appearance of Spectres, terrible Dreams, and a Madness which easily degenerates into Fury. These vapourous and stupifying Medicines have an uncommon Tendency not only to generate, but also to support and cherish these Disorders; and by the incautious Use of them, it has been frequently observed, that wild Disorders of the Head have been converted into Misfortunes of a more terrible Kind; an Head-ach, for Instance, has been transformed into a Lethargy; an *Hemicrania* into Stupidity; a Palsy into an Apoplexy; a Vertigo into an Epilepsy; and a Difficulty of Hearing into a confirmed Deafness.

Anodynes and Opiates are so unfriendly to the Membranes of the Brain and Intestines, by diminishing their Tone and Strength, so Children and old Persons ought in a particular Manner to abstain from the Use of them; first, because they retard the Discharge by Stool; and secondly; because they weaken the nervous System and Membranes, two Circumstances highly prejudicial, because the Disorders

principally incident to these Ages, arise either from Costiveness, or a Weakness of the Brain and Nerves.

'Tis certain from Experience, that by a liberal Use of Anodynes, Children contract a Dullness of Genius and Memory, which lasts for a considerable Time; for a violent Injury done to the tender Structure of their Brain, is not easily repaired. For this Reason *Stalpart Vander Wiel Cent. 1. Obs. 42.* justly orders, "That Women and Nurses, should not, when the Children committed to their Care are first affected with Pain and Uneasiness, forthwith exhibit Anodynes; since tho' they do not generally by that Means destroy them, they yet often weaken their Brain and Nerves to such a Degree, as to induce violent Tremors, Palsies, and Stupidity." Of the same Opinion is *Dr. Willis* who in *Pharm. Rat. P. 1.* informs us, that by Medicines of this Kind, he knew some seized with Slowness of Genius and Stupidity, and others with Dotage.

Anodynes and Opiates are highly injurious to Persons naturally weak, to those whose Strength is impaired by Age or Diseases, to those whose Pulse is languid, whose vital Motions are defective, or whose Fluids have a Tendency to Corruption. It ought to be a constant Rule to Practice, never to exhibit strong Sedatives, where the Strength is small, and the Pulse, which is always lessened by Opiates, already weak; Opiates and Anodynes are scarcely ever useful when the Viscera are infracted, and their Tone destroy'd, as in chronical Disorders. Nor are such Medicines to be exhibited, in Cases where the Blood and Humours are highly impure, as in caco-chymic and scrobutic Habits, in which the immoderate Use of Opiates, in Order to remove Pains and Spasms, proves mortal, because it quickly

quickly induces a Sphacelus. When violent Pains have greatly diminished the Strength, or a profuse Sweat been excited; these Medicines should be sparingly used; lest a Palsy, or some other nervous Disorder, should be induced. For this Reason, 'tis far more expedient to use Opiates and Anodynes in the Beginning of Diseases, when the Strength is entire, than when it is exhausted by the long continued Shock of the Disorder.

As the two principal Indications for stopping Pain are, its Violence, and the Hardness and Strength of the Pulse, so when these happen, an Hypnotic may be used, especially when the Pain proceeds from an external Cause, such as Worms, the Stone, the Eruption of a Tooth, the Puncture of a Tendon or Nerve, a Division of the Nails by some sharp Instrument, or the thrusting a Nail

deep into the Sole of the Foot, which not only frequently induces a terrible Train of Symptoms, but also sometimes proves mortal.

As in all Cases mild and safe Medicines are preferable to those of a more dangerous and drastic Nature, so in mitigating Pain, we are never to have recourse to strong Anodynes, provided those of a mild and gentle Kind prove sufficient. Among these *Hoffman* recommends anodyne Sulphur prepared from Vitriol, *Spiritus Nitri dulcis* duly prepared; among vegetable Substances, Saffron and Nutmeg; of fragrant Substances Musk and Amber; and of Shop Preparations the Oils of Chamomile and Yarrow. To this Class also belongs Opium depurated with Rain Water, and corrected by a due Addition of Analeptics, Purgatives, or Alexipharmics.

CHAP. V.

Of DIURETICS.

THOSE Medicines which eliminate the salt Serum, impregnated with gross, terrestrial, and recrementitious Parts, by the urinary Passages, are called *Diuretics*; the Medicines of this Kind are, by *Celsus*, in the thirty-first Chapter of his second Book, characterized and enumerated as follows: "Every fragrant Vegetable which is cultivated in Gardens, provokes a Discharge of Urine; such as Smallage, Rue, Dill, Basil, Mint, Hyssop, Anise, Coriander, Garden Cresses, Rocket, Fennel, Asparagus, Capers, Catmint, Thyme, Savory, Nipple-wort, Parsnip, Skinet, and Onions." But of

the Vegetable kind, *Hoffman* recommends as Diuretics, the Roots of Parsley, Celeri, Asparagus, Grass, Liquorice, Madder, Parsnip, Crowfoot, Pareira-brava, Acemella, the Herbs Parsley, Ground Ivy, Horse Tail, Chervil, common Nettle, all Leeks, and all the Species of Garlick, the Flowers of Butchers Broom, and blew Bottles, the Seeds of Carrot, Parsley, Celeri, Fennel, Groomwell, common Nettle, Violets, the four greater cold Seeds, the Seeds of Clubmoss, Winter Cherries, Doghops, Juniper Berries, Strawberryberries, the Wood of the Juniper Tree, Sassafras and its Bark. Among Resins and Balsams, Mastick, Amber,

Amber, the *Balsam of Mecha*, and the Balsam of Capivi. In the animal Kingdom, Catharides, Millepeds, May Worms, Scorpions, Toads, Earth Worms, Cochineal, and Whey. To the Class of Diuretics, also, belong all alkaline Salts prepared by Incineration, as also the Salt of Amber, the *Arcanum Duplicatum*, a Solution of Crabbs Eyes and Nitre. The compound Medicines belonging to this Class are; the Tincture of Tartar, and acrid Tincture of Antimony, the *Terra foliata Tartari*, soluble Tartar, the Spirit of Turpentine, Mastick and Amber, Balsam of Sulphur with Oil of Turpentine, Balsam of Juniper, Oil of Juniper, the *Syrupus Dialecthææ*, the *Trochisci Alkekengi*, and many others.

As the Discharge of the Urine may be impaired and rendered difficult from several Causes, such as, first, a Defect of due Moisture in the Blood; or secondly thick and tenacious Juices, obstructing the small urinary Ducts of the Kidnies; thirdly, a violent spasmodic Constriction of the Renal Ducts; or fourthly their perternatural Relaxation and Weakness, so also the Medicines calculated for restoring a due Discharge of the Urine, must be adapted to the Removal of those several Causes. Thus, for Instance, some Substances, by conveying a due Degree of Fluidity to the inspissated Blood, augment the Discharge of Urine, of which Kind are all aqueous diluting Medicines, liberal Draughts of Spring Water, whether cold or warm; especially if Herbs of a diuretic Quality are infused in them. This Intention is likewise answered by Tea and Coffee, as also by mineral Waters, either hot or cold, as they not only dilute the Blood, but by their alkaline Quality dissolve the viscid and tenacious Humours, and remove

the Obstructions of the Kidneys. The same Effect is produced by Whey, which is possessed of an aqueous, abstergent, and gently stimulating Principle, as also of a sweet nitrous Salt. Other Substances dissolve the tough viscid Humours which obstruct and block up the secretory Ducts of the Kidneys, and by that Means render them fit for performing their Functions; of this Kind are all fixed Salts; and the Lixiviums prepared from them; as also Tincture of Tartar, and the acrid Tincture of Antimony, the *Terra foliata Tartari*, the *Tartarus tartarizatus*, the *Arcanum duplicatum*, a Solution of Crabbs Eyes, and the *Magnesia Alba*, which, with the Acid of the *Primæ Viæ*, is converted into an aperient Salt; as also the Tincture of Quick-lime, Mother of Pearl, and Coral prepared with Lemon Juice, as also the Salts obtained by Exhalation from mineral Waters. Other Substances soothe and alleviate the spasmodic Constrictions of the Emunctories of the Kidneys, which obstruct and prevent the due Discharge of the Urine. The most considerable and efficacious of this Kind are Nitre, the four greater cold Seeds, and Emulsions prepared from them, the Seeds of the white Poppy, of Carrot, and of Club-moss, as also Winter Cherries and Troches prepared of them: The same Intention is answered by the anodyne mineral Liqueur, which is both a safe and efficacious Medicine, as also by Saffron and its Essence, the Juice of Grass in Consequence of its nitrous Salt, a Decoction of the Roots of Grass, and Asparagus, the Oil of sweet Almonds, which is a Liqueur of a highly demulcent Quality. Other Substances by their oleous, subtile, and balsamic Principle, corroborate and strengthen the Kidneys, such as Mastick, Amber, the *Balsamum de Mecha*, the Balsam of Capivi, Turpentine, the Wood

and Berries of the Juniper Tree, Sassafras, Parsley, Fennel, Anise, Crow foot, Celeri, and the Oils, Essences, Spirits, Decoctions and Infusions of them; other Medicines corroborate the Kidneys by their strengthening fixed, terrestrial, and sulphureous Principle. Of this Kind are Dog-hips, Rob of Juniper, and dried Strawberries, Pareira brava, Ground Ivy, the Bark of the Root of the Egyptian Thorn, Horse-tail, Pauls Betony, and Chervil. Lastly, other Medicines powerfully stimulate the renal Ducts, when they are so far weakened, as to have their Functions either impaired, or totally destroyed: Of this Kind are almost all Insects, especially Catharides, Millepedes, Spiders, Scorpions, and dried Toads; and in the vegetable Kingdom, all the Species of Leeks, and Garlick.

Since there is so great a difference between diuretic Medicines, with respect to the Principles and Manner of Operation, their Use must of Course be different, and they must be judiciously adapted to the particular Nature of different Cases; for if to plethoric Patients labouring under the Stone, we should before Venesection and the Diminution of the Quantity of Blood, exhibit hot Substances impregnated with a subtile balsamic Oil, such as Preparations of Turpentine, and Juniper, or the Balsams of *Mecha*, *Capivi*, or *Peru*, or acrid Substances, or such insects as abound with a caustic Salt, Garlick, Onions, or Leeks, we should certainly injure the Patient, bring on an Inflammation of the Kidneys, and promote the Generation of Stone. On the contrary, in moist, less delicate, and more robust Patients, who live upon coarse Food, as also in Diseases arising from a Redundance of impure Serum, a Fluor Albus, a Gonorrhæa, a Disposition to an Ana-

farca, and Leucophlegmatia, these drastic Medicines are of singular Use and Service.

Still greater Misfortunes are produced by acrid and stimulating Substances, in Cases where in Consequence of Spasmodic or nephritic Pains, a Discharge of the Urine is suppressed. Disorders of this Nature are far more safely and efficaciously removed, by such Medicines as alleviate Pain, and relax Strictures; such as Winter Cherries, the Seeds of Carrot, Club-moss, white Poppy, and Gromwell, as also Emulsions of the four greater cold Seeds, the *Trochisci Alkekengi* with Opium, antimoniated Nitre depurated, the Water of the Leaves of Meadow sweet, of the Lime Tree, and of the *Egyptian Thorn*, Oil of sweet Almonds, sweet Spirit of Nitre, the Anodyne mineral Liquor, Whey; and externally, emollient Baths and Fomentations, the Virtues of all which are so great, that by alleviating the wracking Spasms, they not only restore the free Discharge of the Urine, but also facilitate the Progress of the Stone thro' the Ureters, and promote its Expulsion.

In Disorders arising from a Redundance of Salt and tartareous Serum, which is generally the Cause of arthritic and rheumatic Pains, this peccant Humour is carried off by gentle Diuretics, tho' not of the hot Kind, lest by their Means the Spicula of the Salt should be put into a brisker Motion, and the Parts in which they are lodged be more violently racked. The gentle Diuretics, by which this Intention is most effectually answered, are, the Roots of Sarsaparilla, Pareira brava, Sassafras, and China-Root; as also those of Liquorice, Asparagus, Madder, Succory, Fennel, Parsley, and Grass, together with the Wood of the Juniper Tree, and the Preparations of these boiled in Broth made

made with Flesh, or in Water. To this Class, also, belong Whey, and more especially the temperate mineral Waters, and warm Springs.

But in Cases where peccant, viscid and tenacious Humours are lodged in the urinary Bladder, and especially when the Intention is to expel the first Rudiments of a Stone, more acrid and powerful Medicines become necessary. This Intention is answered by Garlick, exhibited with Spirit of Juniper, as, also, by the Powder of Millepedes, May Worms, Essence of Cantharides, Tincture of Cantharides, Tincture of Antimony, and Infusions of Quick-Lime; which may also be cautiously exhibited in a virulent Gonorrhœa, when a viscid and tenacious Matter lodged in the Prostratæ, the Neck of the Bladder, or the Urethra, is to be carried off by Urine.

But the more safe and efficacious Medicines for procuring a free Discharge of Urine are, all Kinds not only of alkaline fixed Salts, but also of those called neutral, for they not only dissolve the tough and viscid Juices, which obstruct the urinary Ducts, but also by a gentle Stimulus promote their Discharge. This Intention is excellently answered by Solutions of the Salt of Tartar, Pot-ash, and fixed Nitre, as also the *Tartarus vitriolatus*, Salt of Wormwood,

Arcanum duplicatum, a Solution of Crabbs Eyes, soluble Tartar, the *Terra foliata Tartari*, antimoniated Nitre, and *Sal Polychrestum*.

These Medicines not only contribute to restore a due and natural Discharge of the Urine, but also produce some other excellent Effects in the Cure of Diseases; for as many of them are possessed of an aperient and inciding Quality, as others of them are corroborative, balsamic, and restore the Tone of the Parts, and others are of an anodyne Nature, so they prove highly efficacious in those chronical Disorders, which arise from an Obstruction of the Glands of the Viscera, and Emunctories, or from a Impurity of the Juices, or a Redundance of saline, acrid, and tartarous Serum; and certainly, if Relief is to be expected from any Medicines in Dropsies, Ædematous Swellings, stony Concretions, the Gout, and arthritic Pains, we are to look for it from the prudent Use of Diuretics: But we are to be aware of all hot, acrid, and caustic Diuretics, and use those which are of a milder Nature, and fit for common Use, such as small *Moselle* Wine, the mild mineral Waters, and such Ales and Decoctions as are gently diuretic.

C H A P. VI.

Of ALEXIPHARMICS.

AN Alexipharmic seems originally to have signified a Remedy to expel, or prevent the ill Effects of Poisons taken internally, and this is *Galen's* Explanation. But since some among the Moderns have conjured up a chimerical Poison, in order to inflame, or otherwise affect the imaginary animal Spirits in acute Distempers, Alexipharmics have been understood to mean Remedies adapted to expel this Poison by the cutaneous Pores, in the Form of Sweat. Hence it appears, that Alexipharmics mean just the same as Sudorifics. I am persuaded that few Theories have ever been introduced into Medicine, so as to be much depended upon, without very ill Effects upon Practice, but that which paved the Way for Alexipharmics, has exerted extraordinary Heroisms, and made uncommon Havock amongst Mankind.

Hippocrates in his Treatise *de Ratione Viæ in Acutis*, has the following Passage: *Whoever in the Beginning of an inflammatory Disease attempts the Cure by Cathartics, does not in the least diminish the Tension and Inflammation of the Part affected, for the Distemper in this State of Crudity, will not yield to such Medicines; on the contrary, this Method of Treatment liquefies and wastes the sound Parts, which would otherwise resist the Distemper, and when the Body is in this Manner weakened, the Disease gets Ground, till at last it becomes incurable.*

Tho' this is said with a great Deal of Justness and Propriety, I am per-

suaded it may with stronger Reason be applied to Sudorifics, that is, to *Alexipharmics*, which frequently do a great Deal of Mischief, and indeed there is nothing in which the lower Class of Practitioners in Physic make more Errors, than in the Use of *Alexipharmics*, which I have frequently known exhibited to young People, of plethoric Habits, in the very Beginning of Fevers, and even without previous Evacuations.

About the Year 1723, 1724, and 1725, a Fever appeared with uncommon Virulence, and was more universal than any I have ever known; and by this, great Numbers of working People perished, in so much, that in many Countries scarce enough were left to gather in the Fruits of the Earth; and this Sort of Fever continued many Years after. In this Disorder it was remarkable, that a warm Regimen or hot Medicines, seldom or never failed to render the Fever continual, and keep it so, bringing on Deliriums, and all Symptoms of Malignity; whereas a cool Regimen, with Evacuations by bleeding, and purging with Caution, and an entire Abstinence from hot Medicines, almost always brought the Fever to a regular Intermission, and then the Bark effectually took it off. As I had an Opportunity of seeing a great Number of Patients under this Fever, I was abundantly convinced, that more died of *Alexipharmics*, than of the Distemper.

But that I may not appear singular with Respect to this Sort of Medicine, I shall give the Opinion of the

the illustrious *Hoffman* upon this Subject, who having just before mentioned Cathartics goes on thus.

There is another Sett of Evacuants which carry off the more subtile Parts of the morbid Matter, by the Pores of the Skin, in a plentiful, less offensive, gentle and more imperceptible Manner. The Remedies most conducive to this are *Sudorifics*, by whose Operation a sensible Moisture is perspired through the cutaneous Glands. Of the vegetable Kind the most efficacious for this Purpose, are the Roots of a very acrid, penetrating, oily Taste, as those of *Angelica*, the different Species of Master-wort, Butter Burr, Elecampane, Lovage, Swallow-wort, Valerian, Contrayerva, *Virginia Snake-root*, Woods of Guaiacum and Sassafras, with their Barks. In the mineral Kingdom, crude Antimony, *Regulus Antimonii Medicinalis*, volatile Tincture of Sulphur prepared with Quick-lime, Sal-ammoniac and Sulphur, corrected and fixed Sulphur of Antimony, and also the Mixture Simplex: Likewise, *Venice Treacle*, its Essence, Spirit and Water, all Spirits, and volatile Salts prepared from the Parts of Animals, particularly Harts-horn, Ivory, and Earth-worms, Spirit of Silk, Soot, the Essences of the Woods, and the distilled fetid Oils, as fetid Oil of Harts-horn dissolved in Spirit of Wine.

These nobler Medicines of the sudorific Kind, owe the Virtue of their Operation to the Power they possess of increasing the systaltic Motion of the Heart, and the Elasticity of the Arteries, as to the Number and Force of their Vibrations, by which Means a greater Velocity being added to the Circulation, they protrude the perspirable Matter thro' the outward and porous Substance of the Skin. This they perform either by a subtile, acrid, hot Oil, as the

Roots above-mentioned, which are called *Alexipharmics*, or by a volatile empyreumatic Salt of an igneous Nature; such as are all the Spirits, volatile Salts, and Oils from Animals; or by an acrid resinous Salt, more or less fixed, as the Root of white Burnet, Guaiacum; and its Bark, Contrayerva, *Virginia Snake-root*: Or lastly they act, and that very powerfully, by Means of a very fine mineral Salt and Sulphur, by which they rouse the nervous Fibres to a violent Motion, and for this purpose a very small Dose is sufficient. Thus a single Grain of diaphoretic Mercury, or two or three Grains of fixed Sulphur of Antimony, will raise a Sweat over every Part of the Body; a Decoction of the Woods, as also *Regulus Antimonii Medicinalis*, have the same Effect.

These strong Sudorifics, tho' given in a larger Quantity, will by no Means raise a Sweat, unless the porous Substance of the Skin be sufficiently open and lax, or unless the Blood be enough diluted. Wherefore if any one, in the Cure of a Disease, thinks sweating required, it will be necessary for him to give the above-mentioned Sudorifics, with a sufficient Quantity of some Liquid to dilute the Blood, for Example, a weak Tea, or a Decoction of Barley; and that the Pores of the Skin may obtain a due Relaxation, the Person to be sweated should be put in a warm Bed, or hot Stove, or into a Bath, especially a vapour Bath, that a plentiful Sweat may be excited.

These very active Sudorifics rarely find a Place in Medicine, and are not to be administered but with singular Caution. For a Sweat never arises in a healthful and natural State, unless the Blood is put into an extraordinary Motion; nor when this happens is it a Sign of Health, like insensible Perspiration, the Matter

of which is void of Acrimony, watery, of Kin to the nutritious Juices, and almost without either Taste or Smell, and differs very much from Sweat, which is of a salt Taste, a fetid Smell, and approaches the Nature of Urine. Besides, these Sudorifics excite a great Commotion and notable Orgasm; for they act not with Moderation but Rapidity; whence it comes to pass, that in Bodies full of Blood, or contaminated Serum, by impelling the Fluids with too much Violence to the small narrow Vessels, they bring on dangerous and acute Symptoms, occasioned by the Inflammation, and Redundance of Humours. But they are most injurious where the *Primæ Viæ* are obstructed by a Load of vicious Humours, where the Body is costive, and when they are administered immediately after a violent Fit of Anger. By this pernicious Practice, arthritic and rheumatic Pains, slow and hectic Fevers, which have proved of long Continuance, and been attended with eminent Danger, have been excited.

In all acute Cases, as inflammatory and scarlet Fevers, *Sudorifics* are to be entirely banished, or at least to be administered very seldom, and that with great Caution, for the promiscuous Use of *Alexipharmics*, as the Custom too generally prevails, only serve to increase Heat, Anxiety, and the Violence of the Symptoms. These Remedies are called *Alexipharmics*, as are also all those of the Theriacal Kind, from a Virtue attributed to them of resisting Poisons, and malignant Humours, for which Reason they are highly extolled by Physicians in the Plague, and other contagious Distempers; but the Truth is, they are much more powerful for the Prevention, than Cure of these Diseases, especially when an epidemical and malignant Distemper owes its Birth to an

over wet, foggy, cloudy Season, which has been long destitute of the East and North Winds; or to a Deluge, or Inundation of Waters. But in this Case it will be much better and safer to give them in Wine Vinegar diluted with Water, or to infuse the sudorific Roots in Vinegar, which by this Means being impregnated with their *alexipharmic* Virtue, two or three Spoonfuls may be drank in any convenient aqueous Vehicle.

But sweating is very servicable in those Distempers which proceed from an external Cold, and obstructed Perspiration, as in Catarrhs, Rheumatisms, Fluxes, Stoppages of the Head, Coughs, and glandular Tumors; also, when Danger is apprehended from a Person's having drank a large Quantity of cold Liquor, when very hot, or in a Sweat. But then they should be administered in the Beginning of these Disorders. Nor is a Sudorific of less Service in the Beginning of any infectious Distemper, taken immediately after a mild Emetic. But perhaps Camphire is the best of Alexipharmics.

Likewise in those Diseases which have their Seat in the porous and fibrous Substance of the Skin, and consist of an acrid viscid Matter, which destroys and deforms its Texture, as an inveterate Itch, the Ring-worm, Leprosy, and venereal Pustules, and Ulcers, a plentiful Sweat may be excited to great Advantage with proper Remedies. The same may be also practised in arthritic and rheumatic Pains in any Part of the Body; for by this Means the acrid, viscid, and stagnating Serum, which adheres to the nervous Membranes, is thrown off and discharged. For the same Reason in all those Diseases which are called *Cold*, as in Dropsies of every Kind, the cold Scurvy, Pox, Tettled Gout, Sciatica, Palsy, and those of the same Na-

Nature, Sudorifics are of great Efficacy, because they promote and restore the Elasticity and contractile Power of the Heart and Vessels, which in Disorders of this Kind are very much depressed, and increase the Circulation of the Blood, for the better Separation of the morbid Matter. But this Course must be persisted in for some time.

Sudorifics always operate best, when taken with a sufficient Quantity of some warm Liquid. *Celsus* in the sixth Chapter of his third Book commends warm Water for this Purpose, his Words are these. "When you perceive the Sweat approaching you should give warm Water to drink, which hath a most healthful Effect, if it excites a Sweat over the whole Body." It is notorious that this is procured in the most plentiful Manner by a Decoction of the Woods, whose Use in venereal Cases, and other cold Distempers, cannot be enough commended. Several Country People have been happily cured of intermitting Fevers, and tertian and quartan Agues, by taking a few Hours before the Fit a Vomit, and immediately after it, a Sudorific of Rob of Elder, Salt of Tartar, and a few Corns of Pepper, mixed together in a Spoonful or two of Brandy.

Diaphoretics are inferior in their Power of acting to Sudorifics, but much superior to them in their healthful Qualities, as they gently increase and promote Perpiration. Of these the chief in the vegetable Kingdom are, the Roots of *China*, Sarsaparilla, the *Carline* Thistle, and Gentian; of Herbs the holy Thistle entire, its Seeds, and all the Preparations from it, whether Essences, Waters, Extracts, or Salts, Water Germander, the Elder and Dwarf Elder with its Flowers, Rob and Water; also Fumitory, Scabions,

Saffron, the Flowers of Marygold, and Opium. In the animal Kingdom, all Bones, Horns, and Teeth of Animals, whether rasp'd or burnt to Ashes, and chymically prepared, especially those belonging to the Stag, the Stones, Shells, and Claws of Crabs. Of Earths, all seal'd Earths, and different Kinds of Marle. Of Salts, the Salts of Plants procured by burning, and Nitre. Of precious and exotic Stones, the *Petra di Porco*, the Eastern and Western Bezoar-Stone. Of Minerals and chymical Preparations, the Flower and Milk of Sulphur, Cinnabar, Native, Common, and that of Antimony, Diaphoretic Antimony, Cerufs of Antimony, Magistery of Antimony, the Bezoardic Mineral, and *Poteries's* Antihectic. Of Compounds Goa-stone, which is compounded of oriental Bezoar, Tragacanth, and Ambergrease, *Sennertus's* Bezoardic-powder, the *English* and *Pannonian* Red-powder, the Mineral anodyne Liquor, Wine-vinegar, or distilled Vinegar with Elder-flowers or Crabs-eyes infused in it.

The Operation of Diaphoretics is manifold and various; for either they act in a privative Manner, by absorbing and changing the Acid in the *Primæ Viæ*, which carried into the Blood depresses its Spirituosity, Fluidity, and intestine Motion; of which Kind are all the Earths of an alkaline Nature: Or by imbibing the superfluous Moisture, and bracing the relaxed Fibres, as the seal'd Earths, Boles and Marles, also Bones and Horns, both those burnt and those chymically prepared, and the Unicorns Stone: Or by relaxing and mollifying, in Diseases of the Skin, its contracted Superficies, by their mild, anodyne and vaporous Sulphur, as the different Species of Elder, especially the Flowers, Saffron and its Extracts, the Flowers of Red

Poppy, or Corn Rose, the Anodyne Mineral Liquor, the Emulsions of Poppy Seed, corrected Opiates: Or by composing and quieting the too violent intestine Motion of the Blood, as the Remedies of the nitrous Kind, corrected by being joined with the more fixed Diaphoretics; as also Spirit of Nitre dulcified, Emulsions of the Four greater cold Seeds, and the milder Acids, as Juice of Lemons, and Vinegar: Or lastly in a positive Manner, by gently stimulating the Fibres and languid Vessels, of which Sorts are the holy Thistle, Water Germander, Fumitory, China, Sarsaparilla, the lesser Centaury, Scabious, Carline Thistle, and Gentian.

Now as the Evacuation of the finer Parts of the morbid Matter, thro' the Pores of the Skin, by insensible Transpiration, is of all others the most healthful, and as the Obstruction thereof is the Occasion of many Maladies, so the Use of Diaphoretics, which promote this cutaneous Excretion, is certainly very great, universal, and almost infallible, in almost all Diseases, even those which from their present Symptoms, we are not thoroughly acquainted with; so that a Physician can by no Means be without them; for an increased Circulation of the Blood, and an enlarged Perspiration, are the grand Mediums and Instrument of Nature, by which the morbid Matter in any Disease is corrected, digested, resolved, and at last thrown off; and thus the Distemper is cured without Danger. Particularly in all acute Diseases, as Fevers and Inflammations of all Kinds, these alone given in some convenient Vehicle, in small Doses, and continued for some time, answer every Intention of Cure, and are in Truth the best Discutients, and Purifiers of the Mass of Blood.

Because excessive Heats, especially in Summer, and in choleric and bi-

lious Constitutions, as also in cholerick and bilious Fevers, dries too much, consumes Moisture, and hinders Perspiration, acidulated and nitrous Remedies, and particularly Crabs Eyes with Nitre, given in a Julep of Diaphoretic Waters, and Syrup of Lemon Juice, by moderating the too great Heat, and procuring a plentiful Diaphoresis, give great Relief to the Patient.

When, thro' the Violence of any Disorder, the Skin is dry, and without Moisture, and its Pores become narrow and contracted, it is always best to join some mild Anodynes and Antispasmodics to the Diaphoretics; and in this Case the Anodyne Mineral Liquor mix'd in the Quantity of three Parts with one Part of the *Spiritus Bexoardicus Buffii*, is of admirable Virtue, as are also fixed, diaphoretic Powders with a little Nitre and Cinnabar, and a small Quantity of an Opiate.

In acute Diseases and Fevers, where but little Acid is lodged in the *Primæ Viæ*, it will be safer and of more Service, to give the fixed and earthy Diaphoretics in a small Quantity, and well mixed with Syrup of Citron Juice, or Wine Vinegar, which will not coagulate, but often resolves and throws off the stagnating Blood, especially if joined with Diaphoretics.

Thus *Hoffman* very justly distinguishes between Sudorifics or Alexipharmics, and Diaphoretics; since the former are such Medicines as excite a violent Heat and Motion, and a considerable Orgasm in the Body, which tend to extort profuse Sweats, and do a great deal of Violence to Nature, which is by this Means deprived of a large Quantity of the more fluid Parts of the Blood, that might otherwise be highly beneficial in preserving the whole Mass in a due State of Fluidity, in promoting the Dissolution of the stagnant and obstructing Humours, and assisting,

assisting the Expulsion of the morbid Matter from the Limits of the Circulation; whereas Diaphoretics are Medicines endued with a gently stimulating and perhaps resolvent Quality, by which they assist Nature in carrying on her own salutary Purposes, without any Tendency to do her any Violence, or divert her from the Method she has begun to pursue.

In order to account for the sudden Effects of some Alexipharmics in raising a Sweat, before they can well be supposed to enter the Mass of Blood, we must observe, that Alexipharmics consist of highly penetrating and stimulating Particles, so that when these act upon the nervous Coats of the Stomach, the Stimulus thereby produced, derives a greater Fluid (if any such there be) into these Nerves, and all the correspondent nervous Ramifications distributed from the same Trunk. Now the Stomach receives a great many Nerves from the descending Trunks of the Par-vagus, and some Branches immediately from the Plexus Cardiacus, formed by the same Par-vagus, and situated a little above

the Heart, from which Plexus the Heart is also furnished with Nerves; whatever therefore stimulates the Nerves of the Stomach, must also proportionably affect those of the Heart, the Consequence of which is, that the Force and Frequency of the Contractions of the Heart, must be increased, and of Course the general Heat of the Fluids circulating by Means of such Contractions, augmented, because the Motion and Friction is greater than before. The Blood thus circulating with greater Velocity, must be impelled more frequently with greater Force towards the Surface of the Body, by which Means, an increased Evacuation by the cutaneous Pores is procured. Tho' I am far from being absolutely certain that what we commonly call the nervous Fluid or animal Spirits, have a real Existence in Nature, yet, let the immediate Vehicles of Sensation and Motion be what they will, what is above advanced with Respect to the Stimulus of the Nerves, is by Experience found to hold true.

C H A P. VII.

Of C A R D I A C S.

CARDIACS are properly such Medicines, as preserve or increase the Strength of the Heart, and by that Means the vital Forces, tho' they do not immediately act upon the Heart, nor are particularly appropriated to the Corroboration of that Part. This Effect they perform either by replenishing the exhausted Vessels with good Humours, or exciting Motion where it was deficient. Nutritives therefore or

Repletives duly chosen with respect to particular Constitutions, belong to this Class, as well as Astringents, Corroboratives, and Stimulants, which are usually accounted the only Cardiacs. In this Sense we are to understand the Definition given by *Harvey* of a Cardiac, which he says is something that is endow'd with a Vertue of speedily recollecting the scatter'd and broken Spirits, and recruiting them with plentiful Sup-

plies, and of corroborating the flaccid Fibres of the Heart.

Hence it appears, that *Cardiacs*, are principally destined to the Removal of some Weakness, and that any thing may be called a *Cardiac*, which removes the Obstacles to Circulation. Wherefore *Valcrengus* was very just in his Notion when he says, that “A *Cardiac* is whatever destroys, or at least blunts the Force of the morbid Cause, restores the lost Tone of the Solids, and gives due Motion to the Fluids, and by that Means procures a just Equilibrium, which is the only and lasting Principle of all the Motions in our Body.” Generally what promotes Motion is also a Cause of the Heart’s acquiring a greater Strength for Action.

But since Weakness does not only arise from a Defect of good Humours, and a flaccid Indisposition of the Vessels, but often times from a Redundance of Humours, a thick and stagnating Blood, with an Obstruction of the Vessels form too great a Rigidity, Contraction, or Compression, it follows that what we call debilitating, refrigerating, relaxing, resolvent, and evacuating Medicines, belong to the Class of *Cardiacs*, in as much as they remove a present Weakness of the Body, by acting immediately and directly in Opposition to the Cause of that Weakness. *Riverius* justly observes, that as the Heart may be debilitated sometimes by a hot, and sometimes by a cold Intemperature, some *Cardiac* Medicines must of Course be of a hot, and others of a cold Nature. *Lindeſtolpe* in his Treatise de *Veneris*, says, that “the Vulgar, indeed, are of Opinion, that there are some Medicines that immediately corroborate and exhilarate the Heart, but I have as yet found out none of this Kind, for all

“Substances which corroborate the Heart; or occasion its strong and frequent Contraction, are the most violent Poisons, and of a Quality the most unfriendly to the Constitution; of this are all acrid, mettalic, acid, and alkaline Poisons, and the putrefactive Poisons of Animals for by large Doses of these Substances, the Motion of the Heart is increased, and the Ruin of the Constitution promoted at the same Time. And as the Diseases arise from different Causes, so whatever Medicine is contrary to a Disease, may be said to be possessed of a *Cardiac* or *Cordial* Quality, not because it corroborates the Heart, but because it proves grateful and agreeable to the whole Habit. Thus in putrid Fevers, and such as arise from a predominant Alkali, all acid; metallic, and vegetable Substances, are *Cordials*. On the contrary, in Disorders arising from a predominant Acid, we are to have recourse to alkaline Substances, as the most proper *Cordials*; in Diseases produced by Rage and Wrath, we must enjoin Calmness and Composure of Temper; in Grief and Sorrow, Joy and Cheerfulness; and in every Disorder, what seems most directly opposite to it.”

Volatile and dissolvent *Cardiacs* which stimulate the Fibres, raise the the drooping Spirits, and over-heat the Body, universally and indiscriminately exhibited to Patients of all Constitutions, are by no Means to be approved of. ’Tis become however, almost universally customary, to use inflammable Spirits, and balsamic and aromatic Medicines, in order to raise the Spirits, when sunk and render’d languid, by whatever Cause. It must, indeed, be confess’d that such Substances rouse the Spirits, and procure a momentary Ease to the Patient; but when unseasonably or excessively used, they excite

cite too violent Commotions in the Juices, and dissipate those which are most fluid, by which Means those which are too thick, and unfit for Circulation, are left behind in the Body. Hence arises Dryness and Rigidity of the solid Parts, and a Weakness arising from Obstructions, and if, in Cases of this Nature, the Use of these Cordial Medicines is repeated or persisted in, these Disorders are augmented and increased. In a word, the Man who foolishly attempts to restore his Strength, or raise his Spirits, by this Method, has the Fate of him, who by blowing Fire, renders it indeed brisker, but at the same Time less durable, than it would otherwise have been. *Paulus Valerengus*, in his *Medicina Rationalis*, endeavours to shew, that what proves a Cordial to one Patient, may prove a Poison to another. The Origin and fatal Consequences of this wretched Custom, are by *Dr. Cheyne* in his Essay of Health and long Life, excellently described in the following Manner, when speaking of the idle Habits of some Ladies drinking Cordials, “ A
 “ Fit of the Cholic, or of the Vapours, a Family Misfortune, a casual Disappointment; the Death
 “ of a Child, of a Friend, with the Assistance of the Nurse, the Midwife, and the next Neighbour,
 “ often give Rise, and become the weighty Causes of so fatal an Effect. A little Lowness requires
 “ Drops, which readily pass down under the Notion of Physic.
 “ Drops beget Drams, and Drams beget more Drams, till they become without Weight, and without Measure; so that at last the
 “ miserable Creature suffers a true Martyrdom, between its natural
 “ Modesty, the great Necessity of concealing its Cravings, and the
 “ still greater one of getting them satisfied someway. Higher and
 “ more severe Fits of Hyterics,

“ Tremors, and Convulsions, begot
 “ by these, bring forth farther Necessity upon Necessity of Drops,
 “ Drams, and Gills, till at last a Kind
 “ of Dropsy, Nervous Convulsions,
 “ Nervous Atrophy, or a Collicative Diarrhæa, if not a Fever,
 “ or a Frenzy set the poor Soul free.”

Give me leave to remark, that *Dr. Cheyne* might have added as a frequent Cause of the horrid Custom of drinking Drams, to these above mentioned, the habitual Usage of any warm diluting Fluids, such as Tea, which in Consequence of their Warmth, relax the digestive Organs, whence Flatulencies, Lowness of Spirits, and a Necessity for Drops, or something else, in order to raise the sinking Spirits.

There are, however, some Cases, in which Cardiac Medicines of this Kind may be properly exhibited. In Palpitations of the Heart, for Instance, and Syncopes, when the Disorders arise from a cold and aqueous, or an inert and mucous State of the Juices; in which Cases the distilled cohobated Waters, and the distilled essential Oils of Baum and Lemon-peel, are principally proper.

Et Müller informs us, that the Cephalico-cardiac Medicine communicated by *Elizabeth* Queen of England, to the Emperor *Rudolphus* the Second, consisted of Amber, Musk, and Civet, dissolved in the Spirit of Roses. According to the celebrated *Hoffman* in his *Medicina Rationalis*,
 “ We, are not to imagine, that a
 “ true and permanent Restoration of
 “ Strength is to be procured by such
 “ Medicines, as communicate Motion to the Spirits, and solid Parts,
 “ since in various Disorders, especially Fevers and Convulsions, the
 “ moving Force of the Heart, Arteries, and Membranes, is sufficiently great, and yet the natural Strength is languid and impaired; so that the true and genuine

"nuine Perfection of the natural
 "Strength, for the most Part de-
 "pends upon proper Aliments; and
 "Liquors converted into laudable
 "Juices and Blood; of which is af-
 "terwards generated, that highly
 "subtile Fluid which is separated in
 "the Brain, convey'd thro' the
 "Nerves to the Muscles and muscu-
 "lar Coats, and which imparts
 "Strength and Vigour to the Body,
 "and all its Parts. The best Ana-
 "leptics are, therefore, those nutri-
 "tive Substances which are possess'd
 "of the most salutary Qualities; of
 "this Kind are Jelly, Broths of
 "Fishes, Capons, Bones, and their
 "Marrow, prepared by boiling in
 "Water, in a close Vessel, with an
 "Addition of a little Wine, a few
 "Slices of Lemon, a little Salt,
 "Powder of Mace and Cloves. Of
 "this Kind is also the Broth prepar-
 "ed of coarse Bread, Water, Wine,
 "and Eggs. To this Class also be-
 "long Chocolate with or without
 "Milk, Asses Milk, Water distilled
 "from coarse Bread, and Lemon-
 "peel; Wine, especially old gene-
 "rous *Rbenish* Wine, and genuine
 "*Hungarian* Wine. But these Nu-
 "tritive and Alimentary Medicines
 "are most proper for recruiting and
 "restoring the Strength, tho' not im-
 "mediately under the Disease itself,
 "nor when the whole Mass of Blood
 "and Humours is highly impure;
 "but in the Decline of the Disease,
 "and in Cases where the Strength
 "has been exhausted and impair'd
 "by the Shocks of a previous Disor-
 "der, the Sallies of exorbitant Passi-
 "ons, excessive Watchings, Labour
 "and Fatigue of Body and Mind,
 "or profuse Hæmorrhages, and e-
 "ven in these Cases, a cautious and
 "prudent Moderation is to be us'd;
 "because these Substances very
 "quickly pass into the Mass of
 "Blood, and augment its Quantity."

With respect to the Use of Cor-

dials in hot Disorders, such as con-
 tinued Fevers, the incomparable
Sydenham delivers his Sentiments
 thus, "Cordials, as I have experi-
 "enced, when exhibited too soon,
 "do Mischief; and unless Bleeding
 "has preceded, may derive the
 "crude Matter of the Distemper up-
 "on the Membranes of the Brain,
 "or upon the Pleura; for this Rea-
 "son I never exhibit them, when
 "either no Blood, or but a little, has
 "been previously taken away, or
 "when no other considerable Eva-
 "cuation has been made, or the Pa-
 "tient has not passed the Meridian
 "of Life; for whilst the Blood re-
 "mains rich enough of itself, it
 "should not be render'd richer, to the
 "endangering the Patient; nor does
 "it require to be rais'd and exalted,
 "so long as no remarkable Evacua-
 "tions have diminish'd its natural
 "Heat. Patients of this Kind have
 "Cordials stored up within themselves
 "which render those of the external or
 "adventitious Kind either superflu-
 "ous or prejudicial. In Cases of this
 "Nature, therefore, I either prescribe
 "no Cordials at all, or those of the
 "weakest Kind. But if the Patient
 "should be greatly weaken'd, and
 "dispirited by copious Evacuations,
 "or if he should be in the Decline of
 "Life, I generally admit of Cor-
 "dials, even in the Beginning of a
 "Fever; and on the twelfth Day of
 "the Disorder, when the Crisis is
 "just approaching, I think a freer
 "Use of the hotter Remedies allow-
 "able, and they may be exhibited
 "sooner, provided there is no Dan-
 "ger of the febrile Matter falling
 "upon the principal Parts; for at
 "this Time, the more the Blood is
 "heated, the more the Business of
 "Concoction is promoted." And
 "a little after he subjoins, "In this
 "Distemper I use the milder Cor-
 "dials at the Beginning, when the
 "Exæstuation is most violent, and
 "gradually

“gradually proceed to the hotter, according as the Fever, or the Degrees of Ebullition require, always remembering, where Venesection has been freely used, or when the Patient is advanced in Years, to administer those of a stronger Kind, than when no Blood has been previously taken away, or when the Patient is in the Vigour of Life. The milder Cordials, are such as are made of the distilled Waters of Borage, Lemons, Strawberries, and the compound Scordium Water, with a Mixture of the Syrup of Baum, Cloves, or Juice of Lemons. But the stronger are *Gascoign's* Powder, Bezoar, Confection of Hyacinth, Venice Treacle, and others of a like Nature.”

All the modern Dispensatories are so full of Cardiacs or Cordials, both of the dry and liquid Kind, that these alone would take up a Volume, was I to specify them all, and that to very little Purpose, because they are generally very insignificant and trifling Medicines. The best Cardiacs are those Remedies which remove the Disorders of which Lowness of Spirits is the Consequence; and next to these is Wine, which exhibited in proper Quantities, and more

or less diluted, as Circumstances require, will generally answer better Purposes than the more pompous Cordials, whilst it is less capable of doing Mischief.

I shall conclude this Article with the Opinions of *Harvey* and *Vallisneri* with respect to the cardiac Powders of the Shops. The former of these affirms, that there is more of a real cordial Quality, in a Spoonful of good Broth, or a few Drops of Brandy, than in a whole Ounce of those officinal Powders, distinguished by the pompous Epithet of Cordials.

Vallisneri, in his *Opere Fisico Medicæ* T. 3. informs us, that those are mistaken who imagine, that earthy Substances, such as *Armenian* Bole, seal'd Earth, *Samian* Earth, Pearls, and Bezoar are, in malignant and pestilential Fevers, properly exhibited with an Intention to resist the Putrefaction, which is generated by an Excess of Heat and Moisture, since this Putrefaction arises purely from Obstructions, and must be great in Porportion to them; and since by earthy, cold, and dry Substances, Obstructions, and consequently the Putrefaction arising from them are augmented.

CHAP. VIII.

Of CEPHALICS.

UNDER the Denomination of Cephalics, are comprehended all those Medicines, which have a peculiar Relation to the Brain; so that cephalic Remedies in general, are such as promote the Secretion and Distribution of the Spirits. This Intention is answered by all such Substances as procure a free

Circulation of the Humours through the Vessels of the Brain: Hence Cephalics are different, according to the Diversity of Causes which may happen to obstruct or hinder the Circulation of the Humours in the Brain. If the Cause, is of the cold and mucous Kind, the Cephalics to be prescribed, must be of an heating, stimu-

stimulating, fragrant, and aromatic Quality; if on the contrary, the Disorder arises from an Excess of Heat in the Body, the Cephalics to be exhibited must be of a cooling and refrigerating Nature. Thus Correctors, universal Evacuants, and other Medicines deserve to be dignified with the Epithet, *Cephalic*, when they have a Tendency to weaken or remove the Cause, which produces any particular Disorder of the Head; since, therefore, different Disorders of the Head, draw their Origins from opposite Causes, those must certainly be in a palpable Error, who only give the Title of Cephalics, to heating and volatile Substances, which have often been found to prove prejudicial in Disorders of the Head. The various cephalic Remedies are, therefore, to be taken from the general Titles or Classes of Medicines opposite to the morbid Cause. Cephalic Medicines are either internal, when for Instance, they are exhibited by the Mouth, in Order to produce their Effects by the general Circulation of the Fluids; or by Way of Clusters, which often produce the most happy Consequences, by making a Revulsion from the superior, and more noble Parts; or they are such as are applied externally to the Head, to which Class belong Errhines, proper Liquors for washing the Head, medicated Caps, and other Remedies commonly called *Topics*, the Materials of which are, also, used against the Disorders of other Parts of the Body. With respect to cephalic Topics in general, we must observe, that the Head is less capable of bearing moist than dry Applications, because the former, by distending or relaxing the Vessels, produce Congestions of Humours, which prove hurtful and prejudicial to the Brain. Nor do moist Preparations applied to the Head ever answer any valuable

Purpose, except in those Cases alone, where the Disorder arises from an Excess of Heat and Dryness, or from an inflammatory Disposition in the Head; for in this Case, agreeably to the antiphlogistic Method, moistening Fomentations, and Epithems, applied to the Head, Neck, and Throat, generally produce happy Effects, since by these Means, the Water insinuating itself into the Pores of those Parts, renders them more pervious, so that the Blood passes more freely thro' them, and consequently presses less forcibly upon the Brain; Decoctions, then, of the Flowers of Marsh-mallows, Mullein, and other Emollients, or moderately warm Oxymel, or Water and Elder Vinegar, are proper, for Instance, in Deliriums, according to *Boerhaave Aph. 702.* in Comas, *Aph. 706.* in obstinate Watchings, *Aph. 709.* in a Phrenitis, *Aph. 781.* in an inflammatory Quinsy, *Aph. 809.* and in a Hydrophobia, *Aph. 1143. N. 5.* In Wounds of the Head and Pericranium, we must not according to *Hoffman* use oleous or pinguious Substances and Ointments, because, by obstructing the Pores, they bring on violent Inflammations. But in their room, we must substitute either dry Substances, such as the Powders of *Florentine Orris*, *Mastich*, and *Amber*; or Honey, with an Admixture of a small Quantity of *Peruvian Balsam*. In other Disorders of the Head, such as Pains arising from a cold Cause, medicated Bags stuffed with heating Ingredients, such as *Sage*, *Marjoram*, *Frankincense* and *Salt*, are generally used with Success. The Patient's Head is also to be washed with a Lixivium, in which Ingredients of a heating Quality have been boiled, since they are highly proper for attenuating the obstructing Matter, and corroborating the Brain.

Sennertus in his *Institutiones Medicinæ* informs us, "that tho' Liquors
" for

“ for washing the Head, are by some
 “ absolutely condemned and reject-
 “ ed, yet they are not altogether
 “ uselefs, since they open the Pores
 “ of the Skin, that the Fumes,
 “ pent up in the small obstructed
 “ Vessels, may be exhale; but they
 “ must not be used, when the Pa-
 “ tient labours immediately under a
 “ Catarrh, or a Head-ach; for they
 “ are more properly and with grea-
 “ ter Success applied, in the Inter-
 “ vals of these Disorders. As for
 “ the Method of using them, the
 “ Head must be washed either in the
 “ Morning, or an Hour before Sup-
 “ per; and when it is sufficiently
 “ washed, it must be dried with mo-
 “ derately warm linen Cloths. Wash-
 “ ing of the Feet is, also, proper,
 “ not only with a View to remove
 “ the sordid Matter collected about
 “ them, but also to derive the Hu-
 “ mours from the Head.” *Campegius*
 in his *Campus Elysus Gallie* gives
 us the following Cautions with re-
 spect to the use of heating medicat-
 ed Bags. “ Let them (says he) be
 “ applied after a considerable, but
 “ gentle Evacuation, and at the
 “ Height, or in the Decline, but
 “ not in the Beginning or Increase
 “ of the Disease, nor before a gen-
 “ tle Evacuation is made, lest by
 “ their hot and attracting Influences,
 “ they should draw the Humours to
 “ the Head, and by that Means do
 “ more harm than good.”

Cheyne tells us, that the greatest
 Advantages accrue to the Eyes,
 Ears, and whole Head, from shaving
 it frequently, and bathing it daily in
 cold Water, mixed with a few Drops
 of Lavender or *Hungary* Water.
 The Benefits, says he, arising from
 this Method, abstracted from the
 Pleasure it affords, are only known
 and relished, by such as have experi-
 enced them. To rub the Head af-
 ter it is shaved, proves an instantane-
 ous Cure for a Cephalalgia, a stuf-

“ fing of the Head, and a Weakness
 of the Eyes, arising from a languid
 and relaxed State of the nervous
 Fibres. And as by every fresh Evacu-
 ation of the Humours, their Quantity
 is not only lessened, but also their
 recrementitious Parts derived thither,
 so the more frequently the Head is
 shaved, the larger Quantity of Hu-
 mours is discharged; so that the
 frequent Shaving of the Head and
 Beard is like a perpetual Fontenel,
 or Veficatory. From frequently
 washing the Skin of the Head with
 Soap and Water, and then shaving it,
 arises another considerable Advantage,
 which is the cleansing the Mouths
 of the cutaneous Pores, from the
 Scurf and Scales, which block them
 up; by which Means a free Dis-
 charge is procured to the perspir-
 able Matter, which, when retained,
 proves highly prejudicial to the Head
 and Brain. Then by plunging the
 Head in cold Water, and carefully
 washing it, the Scales of the Cuti-
 cula are closely braced up, and hin-
 dered from gaping, in an unseemly
 Manner, so that too large a
 Quantity of the perspirable Matter
 should be discharged, and that they
 may the better resist the Influence
 of the external Cold; by which
 Means Persons of an infirm State of
 Health, suffer very considerably; for
 which Reason all valetudinary Per-
 sons should shave every Day, or at
 least as often as they conveniently
 can, and then wash their Heads with
 cold Water. *Celsus*, in the fourth
 Chapter of his first Book, gives the
 following Directions, with Respect to
 the Management of the Head.
 “ The Person (says he) who has a
 “ weak Head, provided his Digesti-
 “ on is good, ought gently to rub
 “ it with his Hands in the Morn-
 “ ing, never if possible to keep it
 “ covered, nor to shave it close to
 “ the Skin. It is proper he should
 “ avoid the Influence of the Moon,
 “ especially

“ especially before her Conjunction
 “ with the Sun ; he must also take
 “ care not to go abroad immedi-
 “ ately after Meals. If he has Hair
 “ he must daily comb it, and walk
 “ much, but neither in the House
 “ nor in the Sun. He must also in
 “ a particular manner avoid the Heat
 “ of the Sun after Meals, or the
 “ Use of Wine ; he must rather a-
 “ point than bath, and when he
 “ does it, it must never be before a
 “ violent Fire, where there is an
 “ Eruption of Flame, but some-
 “ times before a gentle Fire where
 “ the Coals are alive and clear. But
 “ if he intends to use a Bagnio, he
 “ must first sweat a little, covered
 “ with Cloths in the *Tepidarium*,
 “ where he must, also, be anointed,
 “ thence he must go to the sweating
 “ Room. When he has sweated, he
 “ must not go into the bathing Cif-
 “ tern, but pour large Quantities of
 “ Water, first moderately warm,
 “ and then cold upon his Head, and
 “ whole Body, but he must pour it
 “ longer on his Head than upon
 “ the other Parts ; then he must
 “ rub his Head for some Time,
 “ and at last of all wipe himself
 “ and anoint. *Nothing is so benefi-
 “ cial to the Head as cold Water.*
 “ He therefore who has an infirm
 “ Head ought, during the Summer,
 “ daily to plunge it in a pretty
 “ large Vessel of Water ; and tho’
 “ he should anoint without bath-
 “ ing, or cannot endure the Influe-
 “ nce of the cold over his whole
 “ Body, yet he ought always to
 “ pour cold Water on his Head.
 “ When he has not an Inclination
 “ to have the Water touch any o-
 “ ther Parts of his Body, he must
 “ bend his Head downwards, that
 “ it may not reach his Neck, and
 “ that the Eyes and other Parts of
 “ the Face may partake of the com-
 “ mon Benefit, he is every now and
 “ then to apply it to these Parts

“ with his Hands, as it runs down ;
 “ he must necessarily use a spare Di-
 “ et, and such as is of easy Digesti-
 “ on, and if his Head is prejudiced
 “ by Fasting, he may, also, eat in
 “ the Middle of the Day ; but if he
 “ sustains no Injury by Fasting, it
 “ is more adviseable to eat only once
 “ a Day. For his ordinary Drink,
 “ ’tis more expedient he should use
 “ mild diluted Wine, than Water ;
 “ it is also proper that when his
 “ Head begins to ach violently, he
 “ should have a Place proper for his
 “ Repose to betake himself to ;
 “ Wine or Water used continually
 “ by themselves, are not proper for
 “ him ; since they only prove Medi-
 “ cinal when used alternately ; he
 “ must neither write, read nor dis-
 “ pute after Supper : But of all o-
 “ ther Circumstances, Vomiting is
 “ most prejudicial to one in his
 “ State.” From what has been said
 we see, that there are two principal
 Classes of Cephalics, and these are
 the Medicines of the refrigerating or
 cooling, or of the warming and heat-
 ing Kind ; for since, as *Riverius* justly
 observes, the Brain is sometimes at-
 tack’d with cold, and sometime with
 hot Disorders, the Medicines calcu-
 lated for its Relief must, also, be of two
 Kinds, in order to remove the several
 Indispositions to which it is subject.
 “ Heating Medicines (says the last
 “ quoted Author) not only heat and
 “ dry the Brain, but also incide and
 “ attenuate the Phlegm, contain’d in
 “ it ; whereas those of a refrigerating
 “ Quality, partly correct the hot In-
 “ temperature of the Brain, and part-
 “ ly inspissate the acid saline Phlegm,
 “ and other serous Humours, which
 “ produce violent Defluxions.” To
 these two Classes of refrigerating
 and heating Medicines we may re-
 fer what *Hoffman* in his *Annotat. ad
 Poter.* proposes in the following
 manner. “ Two Kind of Medicines
 “ are principally proper in Disorders
 “ of

“ of the Head, which arise from
 “ an irregular and desultory Motion
 “ of the Spirits; or from Obstruction
 “ of the Nerves and Vessels of
 “ the Brain. Of the former Kind
 “ are Anodynes, which, by their
 “ grateful Exhalations stop the tumultuous and disorderly Motions
 “ of the Spirits, such as the Flowers
 “ of the Cowslip, of the Lime, of
 “ Piony, of the *Egyptian* Thorn, of
 “ Elder, of Roses, of Violets, of
 “ the wild Poppy, and of Lillies of
 “ the Valley, as also odoriferous and
 “ scented Substances, such as Musk,
 “ Castor, Amber, and Saffron. To
 “ the latter Class belong such Substances, as contain a subtiler oleous
 “ Salt, of which Kind are all oleous
 “ Substances, and volatile Spirits obtained from Animals; as also Marjoram, Rue, Lavender, Valerian,
 “ Aloes Wood, Garden and wild
 “ Rosemary, Cardamoms, Cubebs,
 “ Mother of Thyme, Basil, Amber,
 “ Ambergrease, and Peruvian Balsam,
 “ all which boil'd with Water or
 “ Wine, or infused in any proper
 “ Menstruum, prove excellent Medicines for Disorders of the Head.”

But such Substances as relax the too much constricted Vessels (in Consequence of which Constriction, a brisker Motion of the Humours, and a greater Heat in the Body are procured) retard the accelerated Motion

of all the Humours. As to what we call cephalic Specifics, which by a peculiar Virtue act upon the Head, and remove its Disorders, without influencing any other Parts of the Body, and are consequently indiscriminately proper in all Indispositions of the Head, from whatever Cause they may arise, we must in this Affair be cautious in passing our Judgment, since some maintain, that there are really such Medicines, whilst others deny the Fact, and engage the opposite Party with Experience, the most conclusive of all Arguments. *Wedelius* in his *Centuriæ Exercitationum Medicarum* Cent. 1. Dec. 7. informs us, that Hyssop was the cephalic Specific of *Hippocrates*, as appears from his Book *de Morbis Sacro*, compared with what he has said concerning Hyssop. But this Plant can only be proper in one Species of Epilepsy; when, for Instance, it is produced by a Redundance of Phlegm, concerning which Species *Hippocrates* treats in that work. In this Case, indeed, heating and drying Medicines are proper: Hyssop is a Plant of this Kind, and *Wedelius* himself informs us, that it abounds with a volatile oleous Salt. *Hippocrates*, also, in his Work *de Diæta Lib. 2.* informs us, that Hyssop is hot, and evacuates Phlegm.

CHAP. IX.

Of BALSAMICS.

THE very word *Balsam* seems, in all Ages, to have had an Idea of Excellence and Efficacy affixed to it, above any other Branch of the *Materia Medica*; for the ancient Physicians, by this Word, meant a

ny Species of Medicine, which powerfully recommended itself by a grateful and delicious Fragrance, and whose Use, both internal and external, was of singular Efficacy in preventing Putrefaction, and resisting

sisting Corruption. *Balsams*, 'tis true, were originally used, for embalming and preserving the dead Bodies of those, who had signalized themselves by great and heroick Deeds, or endeared themselves to Mankind by the Practice of the social Virtues. And when the thinking and sagacious Part of Mankind observed, that the Bodies of the Dead, were, by Means of *Balsams*, enabled to defy the Attacks of Corruption, for an immense Series of Years, they began to imagine, that their Virtues might extend to the Living, protract Life, and corroborate what they called the *Calidum Innatum* in the Blood. But however unintelligibly they may have talked upon this Subject, yet it is certain, that the Notion was just and well grounded, since we are taught by Experience, that amongst the vast Variety and infinite Store of Medicines, with which the Mineral, Animal, and Vegetable Kingdoms supply Mankind, none are more powerful, none more efficacious, than those which come under the Denomination of *Balsams*, and *Balsamics*. But as all *Balsams* are not alike efficacious, nor equally adapted to medicinal Uses, I shall only consider those *Balsamics* which seem best calculated to answer the Intentions of Medicine, whether Preservative or Curative: I shall farther specify the Principles by which they operate, enumerate their several Virtues, and give Directions with regard to their Uses. Mean time, it may not be improper to enquire into the Origin of the word *Balsam*, and ascertain the precise and determinate Idea, which ought to be affix'd to it.

Since, then, the Inhabitants of *Palestine* and the Coasts of *Phœnicia*, and perhaps their Neighbours the *Arabians* and *Egyptians*, were, according to the best Accounts, the first who used *Balsams*, common Sense

directs us to the Genius of the oriental Languages for the Origin of the Name. Whether then it is a simple Word, which is most probable, and most consonant with the Genius of the *Eastern* Language, and derived from *Bossem*, a Word peculiar to the *Hebrews*, for expressing the most fragrant and delicious Substances, and in which other Nations have probably inserted an additional Letter, as in many other instances they did; or whether, with others, we maintain that it is compounded of *Baal Sche-men*, which signifies, the chief or Prince of Oils and Spices, yet still it amounts to the same Thing, since by the Import of the Word in both Cases, it is plain, that only the best Spices, Oils and Resins, and such as excell'd all others in their Virtues, the Fragrancy of their Smell, and the Sweetness of their Taste, were called *Balsams*; and the Idea which the word *Balsam* or *Balsamic*, should now convey, is that of a Medicine, possessed of a sulphureous, resinous, and oleous Principle, which at the same Time must be fragrant and friendly to Nature, and by Means of which it operates. Two things must, therefore, concur to characterize and constitute a *Balsam*: the First is, that the greater Part of its Substance ought to be inflammable, that is, either of an oleous, or resinous Nature. The second Circumstance necessary to constitute a *Balsam* is, that its Substance be of a grateful Smell, and pungent Taste, that it may give Proof of its Efficacy, and of the Smallness and Minuteness of its Parts. So that according to this Doctrine, all Sulphurs, and resinous Substances, as also all inflammable Oils, tho' of the Consistence of a *Balsam*, are yet to be excluded from the Class of genuine *Balsamics*, if they want the Fragrancy of Scent, and Deliciousness of Taste, which are requisite to constitute a *Balsam*. Thus Naphtha, or Rock Oil,

Oil, Jews Pitch, Refin of the Pine, the Oils of Turpentine, and Fir, ought by no means to be rank'd among the Class of *Balsamics*, tho' they are inflammable penetrating Substances, excellent for the Purposes of embalming, and promise very salutary Effects, both when used internally and externally. Yet because they abound in a too strong acrid, and penetrating Sulphur, which is not altogether friendly and agreeable to Nature, they are therefore less fit for restoring lost Vigour, and recruiting impair'd Strength. Nor are Substances whose sole Property is Fragrancy of Smell, such as Civet, Musk, and the fragrant Flowers of Jessamine, Oranges, or the Hyacinthus Tuberosus, to be properly esteem'd *Balsamics*; because Fragrancy alone, which is owing to a fine and easily exhaled Sulphur, is not sufficient to constitute a *Balsam*; but 'tis necessary, that this fragrant Principle be blended and incorporated with a subtile acrid Oil, and an inflammable Refin.

'Tis, therefore, justly to be doubted, whether a true and genuine *Balsam* is to be found in the animal Kingdom. Mean time the vegetable Kingdom is richly stored with Medicines of this Class, of which the most ancient, and that which first bore the Name of *Balsam* by way of Excellence, is the *Opobalsam* of the *Arabians*, and *Egyptians*.

This *Balsam* was always had in so great Esteem by the Antients, that they made it an Ingredient in their most noble Antidotes, which were sold for double their Weight in Silver, according to *Theophrastus*, *Pliny*, and *Dioscorides*. This is easily accounted for, since the *Balsam-tree* being very small, and not able to afford a great Quantity of *Opobalsamum*, its Price must of course run high. This, also, was the Reason why the *Opobalsamum* of the An-

cients, according to *Lobelius in Animadversionibus*, was often vitiated with Cyprus Turpentine, or the Oil of the Mastich-tree. Since, then, the *Balsam* of *Meccha*, of all others the finest, is without doubt the True *Opobalsamum* of the *Egyptians*, true exactly resembles it in all its Qualities, its Use in Physic is to be highly Recommended; and of this, dissolved and prepared with a spirituous Menstruum, very efficacious and elegant Medicines may be made for internal Use.

The *Balsam* of *Tolu* is the next in Value, as a Medicine, and is frequently us'd as a *Succedaneum* to the true *Opobalsamum*.

The next is that which is brought from *Peru*, and is called *Peruvian*, and *Indian Balsam*. It is possessed of very singular and efficacious Qualities, as is sufficiently obvious from its fragrant Smell, and aromatic Taste. It was at first only used as an external Medicine; but in Process of Time, some Physicians and Chymists began to use it internally, sometimes mixing it with Pills, at other times dissolving it in highly rectified Spirit of Wine, and on other Occasions incorporating it with Sugar, or any other Ingredients they thought most likely to answer their Intention.

The next is the *Balsam* of *Copivi* or *Copaiba*, which has of late Years acquir'd an uncommon Reputation, and not undeservedly.

Having taken Notice of the liquid *Balsams*, with which Nature has so bountifully supplied us, I shall consider those which are of a more dry and solid Nature, such as the resinous fragrant Gums, impregnated with an agreeable Oil: Of these the principal are, Benzoin, pure Storax Calamita, Ladanum, Myrrh, and Mastich. These are produced by making an Incision in the Bark of the *Balsam bearing Trees*, which are always
N green,

green, in the hottest Season. From these Trees a tenacious Liquor drops, which becomes gradually more solid, as its humid Parts are exhal'd by the Heat of the Sun; for which Reason these resinous Gums are justly called dry *Balsams*, because in all Points they agree with *Balsams*. For their whole Substance is inflammable, they have a frequent Smell, are of a penetrating Taste, they are dissolved, tho' not totally, in highly rectified Spirits of Wine, and yield an Oil when subjected to Distillation.

Having mention'd the *Balsamic* Gums and Resins, it remains that I direct my View to those Woods which are impregnated with a balsamic Principle; among these the first Place has been universally assigned to Aloes Wood, otherwise called *Xyloaloes*, the whole of which is resinous, of an aromatic and bitter Taste, and of a fragrant grateful Smell, especially when reduced to Powder.

The *Lignum Rhodium* deserves to be consider'd. Its Root is resinous, and of an aromatic Taste, and a fragrant rosy Smell; it grows in the *Canary Islands*, and, when subjected to Distillation, yields a very fragrant Oil, the Use of which is highly extolled.

The next in order is the Yellow-Sanders, which abounds with a fragrant Refin: This is plain, from the Spirit of Wine drawn off this Wood, which smells almost like Amber; and if the Tincture is made with rectified Spirit of Wine, and the Spirit is drawn off by a gentle Heat, a most fragrant oily Liquor remains, of the Consistence of *Peruvian Balsam*. A Decoction of this Wood is highly to be valued on Account of its penetrating Refin.

Of the *Balsamic* Barks the principal are, the Bark of the Sassafras Wood, *Peruvian* Bark, Winters Bark, that of Cascarilla, and the true Costus. They are endow'd with

a resinous, *Balsamic*, and subastringent Principle, which is not only discovered from their penetrating Taste and Smell, but, also, from the highly penetrating Oil, which these Barks yield, upon being distilled with Water.

In the Northern Countries the Juniper-tree is truly of the *Balsamic* Kind; for not only its Wood and Leaves, but particularly its Berries, abound with a subtile penetrating Oil, which they yield in great Quantities, when subjected to Distillation by the Worm. And this Oil, when pure and unadulterated, is an excellent Strengthner of the Nerves, and powerfully promotes a Discharge of the Urine, as most other *Balsams* do. There is also a Decoction prepared of the Wood itself, which is of singular Use in the Cure of the Scurvy.

But besides these Simples already mentioned, of a fragrant Smell, and penetrating Taste, with which Nature has bountifully furnish'd us, Oils also of the same Qualities ought to be reckoned among *Balsamics* or *Balsams*; for subtile etherial Oils, are certainly liquid Resins, or *Balsams*: For the principal Element which is the Source of the fragrant Smell, the penetrating Taste, and healing Quality, by which all *Balsams*, whether liquid or solid, act, is no other than a subtile, volatile Oil, which being taken away, the Substance in which it was lodged becomes effete and useless.

For this Reason it may be asserted for Truth, that all those Aromatics, which in Distillation yield a fragrant and penetrating Oil, such as Cinnamon, Cloves, Nutmegs, Mace, Cardamoms, Cubebs, Lemon and Orange-peels, are justly to be rank'd among the principal of the *Balsamics*. For this very Reason, *Valerius Cordus* in his Dispensatory, orders Oil of Cloves to be used as a *Succedaneum*

to the *Opobalsamum*, in all the Antidotes in which it is ordered for an Ingredient. "There are not, says he, in our Days, *Opobalsamum*, *Carpobalsamum*, and *Xylobalsamum* to be found, which come up to the true Descriptions given us of them; but as we are taught by Experience, that the distill'd Oils of Cinnamon and Cloves, of which the Ancients were ignorant, are equal in their Virtues to the true *Balsam*, for this Reason we have, in our *Theriaca*, substituted the Oil of Cloves instead of the *Opobalsamum*. It would not be improper to substitute instead of *Carpobalsamum*, Cubebs or Cloves, or Cardamoms and Aloes Wood, instead of the *Xylobalsamum*."

These aromatic Oils, then, are subtle spirituous *Balsams*, of so uncommon Virtues and Efficacy, that the other oriental *Balsams* can scarcely be expected to come up to them; for these produce their Effects only by a subtle Oil; neither is it difficult to reduce these very penetrating and liquid Oils, either to the Consistence of a *Balsam*, or to the Form of a Resin, provided a concentrated acid Spirit, such as the Oil of Vitriol, be duly mixed with them.

In our own Country there are also spirituous *Balsams* of this Kind, which both on Account of their Virtues and Fragrancy, render it a dubious Point, whether they are not of equal Value with the oriental *Balsams*, and aromatic Oils; and these *Balsams* produced in our own Country are Oils distilled from aromatic Herbs, of a fragrant Smell, and penetrating Taste.

The principal Herbs of this Kind are Rosemary, Lavender, common Spike, Marjoram, common and *Turkish* Baum, Basil, Mother of Thyme, *Roman* Chamomile, and all the Species of Mint, Water-Mint, Cost-

mary, Field and Mountain Calamint, curl'd Mint, that Origanum commonly called the wild Marjoram. These Herbs when duly distilled, yield very fragrant and efficacious Oils; but as these Oils are rarely to be met with pure in the Shops, but are adulterated in their Distillation with Turpentine, it happens that they do not discover the Efficacy of which the genuine Sorts are possessed, in corroborating the Tone of the Nerves, and of the other solid Parts. They are most conveniently used when dissolved and reduced to Essences; and *Quercetan* in the End of his *Pharmacopoeia Restituta*, has these remarkable Words concerning them. "In Germany an Expedient is lately found for reducing the penetrating Oils into some pure and grateful Essences, which preserves the Colours, Smells and Tastes of the peculiar Oils, without any other Mixture, than the *Celestial Manna* well purified, which extracts the Virtue of these Oils, and by its Admixture proves an excellent Corrector to them." There is no doubt but the Menstruum so highly commended by this Author, is highly rectified Spirit of Wine, prepared according to Art for a thorough Dissolution of their Oils.

From what has been said, I think it plainly appears, that the vegetable Kingdom supplies us with the noblest and most efficacious *Balsams*, which, when skillfully used, are of singular Service in curing Diseases, and preserving Life and Health. Neither is it to be forgot, that the *Balsamic* Plants and Trees, produced by the bountiful Parent of the human Race, for their Comfort and Preservation, are distinguish'd, as it were, by an external Mark or Characteristic, expressive of their latent and inherent Efficacy against Corruption, and consequently of their *Balsamic* Nature: And this Characteristic is, that almost

all of them flourish perpetually, and are what we call *Ever-greens*. We are, also, on this Occasion to enquire, whether Heaven, who in all her Measures consults the Interest of Mankind, has not conceal'd *Balsams*, for the Preservation of the human Species, under the Earth, and in the Bottom of the Sea; if we then diligently enquire into the Nature of the Bodies lodged there, we shall find two dry *Balsams* hid under the Earth, and diffused thro' the Seas, which seem to vie with the other *Balsams* procured from the vegetable Kingdom. These are *Ambergrease*, which in the Eastern Countries is very fine, and had in great Esteem; and the Amber produced in the Northern Climates. Both of them furnish us with *Balsamic* Medicines, which produce very instantaneous, and speedy Effects.

These, then, are the natural *Balsams* known to us, which are certainly fine Preservatives of Life and Health; and from which a skillful Physician may, by a judicious Mixture of other Substances, prepare the best and most efficacious Medicines.

Besides, these *Balsamic* Species were with Success join'd by the Ancients to laxative and purgative Medicines, for they thought, that the violent Strength of Purgatives was unfriendly to Nature, and stood in need of a Corrector, in order to strengthen and corroborate.

The *balsamic* Species are, also, excellent Correctors to Medicines of a stupefying and narcotic Quality. For this Reason we find, that the Antients always mixed them with Opiates; because they imagined, that by their Means the cold Qualities of Opium, and other Narcotics, were destroyed; and that the Spirits when laid asleep by them, were roused and rendered active; and undoubtedly the *Pil de Cynoglossa* could

not be so safely used, unless the Roots of the Hounds-tongue, and the Seeds of white Hen-bane, and the Extract of Opium, were mixed with Olibanum, and Resin of Storax. Nor would the *Pil de Styrace* be so effectual in dissolving acrid Humours in Coughs, and Catarrhs, unless they had at the same time in their Composition, Olibanum, Resin of Storax, and Myrrh. The *Laudanum* of Sydenham, which is much used, not only in England, but in other Countries of Europe, is not a little corrected by the Addition of these aromatic Substances, Cinnamon, Nutmegs, Cloves and Spanish Wine. The *Elixir Proprietary* invented by Paracelsus, and the *Pil Ruffi* and *Pil Avicennæ*, prepared of the same Species, have retained their Reputation for a great while, because by the Addition of Myrrh, which is of a *balsamic* Nature, and Saffron, the cathartic Violence of the Aloes is much corrected and subdued.

Balsamics are, therefore, very properly mixed with evacuating Medicines, not only in order to correct their drastic Qualities, but also to assist Nature in performing the several Excretions, and to preserve the Strength which Evacuants generally impair. For this Reason, they are very properly combined with Emetics; as also with Sudorifics. 'Tis sufficiently known to every Practitioner, how efficacious balsamic Medicines are in curing the Disorders of the Glands, and removing those Diseases which arise from their too great Laxity, a Defluxion of Humours upon them, or too copious a Discharge of their Contents. Balsamics are, also, excellent Pectorals, because they remove Obstructions of the Lungs, promote Expectoration, and surprisingly corroborate the pulmonary Vessels. Medicines of the balsamic Kind afford considerable Relief

Relief, in Pains arising from the Stone in the Kidneys, or Bladder. Besides, when the Menfes are either defective or too copious, or when too frequent Abortions, or Sterility on some other Account, destroy the Prospect of a hopeful Progeny, no Medicines are better calculated than Balsamics, for corroborating the relaxed Tone of the Uterus, that Nature may be thus rendered able to subdue and eliminate what is noxious, and by that Means provide a proper Receptacle for cherishing and perfecting the Foetus.

The celebrated *Frederic Hoffman* asserts, that balsamic Medicines are truly universal, and of extensive Use in Physic, and that their Virtues are as great as those of any other Class of Medicines whatever, since they are suited to all Constitutions, easily incorporated with all other Remedies, and exquisitely calculated for subduing and removing almost all Diseases. Balsamics have this peculiar to themselves beyond other Medicines, that they are friendly to the human Constitution, and conspire as it were, and contract an Affinity with it. Of this we may easily be convinced, by observing how speedily Strength impaired by chronic Disorders, old Age, or any other Accident, is restored by the timely and seasonable Use of Balsamics. For this Reason no Medicines are so effectual in Faintings from whatever Cause, as *Balsamics*; and in a Word, they wonderfully recruit, restore, and preserve that which is the original Source of Life; and imparts Strength, Pulsation, and Tone to the Heart, Arteries, and Nerves, whether we call it Principle, Spirit, Soul, or Nature; for they seem to be transformed into the Nature and Genius of that noble and wonderful Substance, which is the Director and Source of Motion in all our Mem-

bers; for, in a *Syncope* they so suddenly restore Motion to the oppressed Heart, purely by their Smell, that we cannot enough admir'd their Efficacy; for such is the Nature of all Substances which abound with a penetrating and fragrant Oil, that when used either internally or externally, they singularly cherish and preserve the Strength of our Constitutions. On the contrary, every Thing that is putrid and fetid, and the Reverse of Fragrant, is highly prejudicial to Strength, and the vital Motions which it soon oppresses and destroys; for every Degree of Putrefaction is highly prejudicial to Life, and when it either begins, or is increased, in a human Body, the Strength and vital Motions forthwith fail and are destroyed, as we evidently see in Plagues, malignant Fevers, and Mortifications of the internal Parts; for this Reason Remedies prepared of *Balsamics* are justly stiled the *Balsams*, the Waters, and Spirits of Life, since they have such a direct and immediate Influence upon it.

Since then *Balsamics* convey Motion, Strength, and Tone, to all the Parts of the Body, we may easily see, that these Medicines must be singularly efficacious in those Disorders and Indispositions, where the Strength and vital Motions are impaired, or where the Viscera and other Parts are too much relaxed, and deprived of their due and proper Tone. For this Reason, they will never frustrate the Expectation of the Physician, who prudently exhibits them in Weaknesses of the Brain and Nerves, Imbecillity of the Memory and Senses, a Palsy of the Members, and Privation of Voice, a Hemiplegy, Inappetencies, Loathings of the Food, Vomitings, Diarrhæas, and Gripings of the Belly; in Cases where Flatulencies prove uneasy, in Langours of the whole Body, in Faintings, and in all cold catarrhus

Defluxions, in Coughs that are too moist, a Coryza, a Fluor Albus, a Gonorrhæa, a moist Asthma, and in a Word in all Cases where the Parts are to be strengthened. Then again, as the best and most valuable Balsamics convey Strength and Energy to the solid Parts of our Bodies, especially to the Heart, and muscular Fibres, which move and impel our Fluids, hence it follows, that they are the surest and most efficacious Preservatives against all Kinds of Diseases, as will sufficiently appear from the following Considerations. As long as the Blood and Humours are quickly and uninterruptedly carried thro' the Ducts and Vessels of the whole Body, and what is superfluous and recrementitious is carried off thro' proper Strainers and Emunctories, so long the whole Body, and each particular Part of it, are in a State of Health, and duly perform their respective Functions: But as soon as this Motion is disturbed, or interrupted, in the whole Body, or any of its Parts, or when the necessary Secretions are not duly made, a sure Foundation is, by these very Means, laid for Diseases. Now nothing is of more Efficacy for preserving the vital Circulation of the Humours, and carrying on the necessary Business of Perspiration, than those Substances which strengthen and corroborate the Heart, the principal Part of the Body, with their balsamic Qualities. But our noble Balsamics are particularly and singularly useful as Preservatives with uncommon Success, when epidemical Disorders rage; they are, also, very properly joined with Alexipharmics in the above-mentioned Disorders, because they resist Putrefactions, recruit the Strength, and promote a due Circulation of the Humours; and since they so powerfully guard against Putrefaction, which is so prejudicial to Life, they

are, for this Reason, very properly and successfully used in the venereal Disease, which is truly of a putrid Kind, and in those Scurvies which are the Result of an impure Air, and unwholesome Aliments; for the Decoctions, Elixirs, and Essences of the Woods, derive their Virtues and Efficacy from the balsamic Qualities of the Ingredients. Besides, Balsamics, especially of the fragrant Kind, have this singular Advantage attending them, that they becalm the exorbitant Motions of our Fluids, and allay Pain. For this Reason, in violent Head-achs, Tooth-achs, and Pains of the Ears, they often afford great Relief, even when only externally applied. Neither is it to be forgotten, that Balsamics prove excellent Correctors to all the more violent and drastic Medicines, especially Evacuants and Anodynes; for they remarkably qualify their Virtues, by their Qualities. For this Reason Balsamics are very happily joined, with almost all evacuant and anodyne Medicines. From all these Considerations it appears, how proper and efficacious Balsamics are, for the Cure of a large Number of Diseases.

But as nothing is in every Respect perfect and compleat, as there is no Medicine however valuable in itself, but what produces bad Consequences, when imprudently exhibited, there is no doubt to be made, but this is also the Case with Balsamics; for when there is in the Body too large a Quantity of hot and fervid Blood, when its Motion is too much accelerated, and the Pulse quick and vehement, Nature has, in these Cases, more need of a Check than a Stimulus; for which Reason we must neither attempt to excite, nor augment the Motions of the Fluids. Besides, fragrant Substances have this Disadvantage attending them, that when the Brain, in Consequence of
some

some Weakness, with Difficulty transmits the Blood, and the Vessels of the Head are become turgid with Humours, they occasion a greater Derivation of Humours to it, and sometimes increase the Pains, Torpors, Vertigos, and Oppressions of the Senses. I must here add, that Physicians have not as yet sufficiently discovered the Virtues and Efficacy of *Balsamics*, in the Practice of Medicine, since they are far more powerful and efficacious than is commonly believed. The spurious *Balsams*, which are commonly sold, and which ought to be made of the purest, ethereal, aromatic and cephalic Oils, are for the

most Part sophisticated and adulterated, so that Physicians have no Reason to be surpris'd, if they do not produce the Effects they would do, if they were pure and genuine. I must in the last Place observe, that Physicians are very faulty in drowning, as it were, *Balsamics* in spirituous Liquors, since they almost always either mix them with Spirit of Wine, or join them with it by Distillation, by which Means the Virtues of the *Balsamics* are infringed, and it assumes a violently hot Nature. The more then their genuine Natures are retained, the more efficacious and useful they are.

C H A P. X.

Of E M M E N A G O G U E S.

Emmenagogues are Medicines which promote the menstrual Flux, tho' *Hoffman* includes under this Name, those Remedies which cause a Discharge of Blood from the hæmorrhoidal Veins.

Among those which best and most commodiously answer this Intention, we may reckon the Roots of Birthwort, Zedoary, and the five aperient Roots, the Herbs Mugwort, Calamint, Feverfew, Pennyroyal, Baum, Savin, Poly Mountain, Rue, Marjoram, Rosemary, Wallflowers, Saffron, Bay-berries, Juniper-berries; the Gums Bdellium, Galbanum, Opoponax, Sagagenum, and Amber: Among purgative Substances, Aloes, Rhubarb, and Bryony; as also Aromatics, and animal Salts, Castor, and Chalybeate Preparations, which excel all others of the mineral and chymical Kind.

The more these Excretions are subservient to Life and Health; the more it were to be wished, with *Hippocrates*, that we had certain and efficacious Medicines for regulating them, and by that Means preventing and curing several very terrible Disorders. But as these Excretions are principally the Work of Nature, and in Women appear, return, and end at certain Periods, but are neither incident to all Men, nor so periodical as the *Menses*, and as a certain Redundance of Blood, together with a certain State of the Vessels of the Anus and Uterus, disposed to a spontaneous Evacuation, are requisite in order to these Discharges, and as these Evacuations may be obstructed, or totally destroyed by various Causes, it must of Course be a difficult Task, to fall upon effectual Means

of restoring these Evacuations when stopt, or enlarging them when impaired; neither of which Ends can ever be attained, without knowing the Cause from which the Misfortune proceeds.

But supposing that there is a Redundance of Blood, the principal Cause of this Evacuation; supposing also, that the Vessels of the Uterus and Anus are so disposed, that they may be distended, by a large Quantity of Blood flowing to them, and be capable of discharging this Blood; yet if the Excretions are not duly carried on, either on Account of Obstructions, or spasmodic Constrictions of the small lateral Vessels of the Arteries, in Consequence of this, the Blood does not circulate naturally; or on Account of a Diminution of the spirituous Principle of the Blood, and the elastic contractile Force of the Heart and Arteries, then the above enumerated Medicines afford the desired Relief: For the capillary Vessels are excellently opened, and Obstructions removed, by the five aperient Roots, Birthwort, Rhubarb, Briony, and Wall-flowers, especially if exhibited by Way of Decoction with some saline Stimulus, such as Borax. This Invention is, also, excellently answered by the Gums exhibited with Aloes, and other Purgatives, in the Form of Pills. The small capillary Ducts, when spasmodically constricted, or preternaturally contracted, are excellently relaxed and opened by Mugwort, which is of a demulcent Nature, as also by Yarrow, Saffron, and Castor. In order to restore the spirituous Principle of the Blood, strengthen the Solids, and confirm the Tone of the Fibres and Vessels, such Corroboratives are to be used, as operate by their fine volatile and oleous Salt, among which we may reckon all Aromatics, Myrrh, the Berries of the Bay, and Juniper Trees,

Rosemary, Penny-royal, Baunt, Savory, Savin, Wall-flowers, Calamint, Amber, Filings of Steel, Chalybeate Tinctures, and volatile oleous Salts.

When the Evacuation is impaired, or rendered slow, by a Redundance of Blood, which too powerfully resists the Elasticity of the Vessels, the Emmenagogues already mentioned, especially those of the hotter Kind, are by no Means to be exhibited; for by these the Blood is thrown into violent Commotions, and a Train of formidable Symptoms is frequently brought on; in this Case, therefore, Venesection is the first to be recommended, since by Means of that alone those salutary and critical Evacuations are often happily restored.

Nor are the Emmenagogues already enumerated proper, in Cases where there is a Deficiency of Blood, and laudable Juices, as in Persons recovering from the Shock of a Disease, those whose *Primæ Viæ* are loaded with viscid Sordes, or those whose villous Coats of the Stomach are lined with a viscid Mucus, by which means Digestion and Chylification are unduly carried on; in Cases of this Nature, the principal Intention of the Physician ought to be, not only the Regeneration of good and laudable Blood by nutritive, gelatinous Substances, and Broths easily convertible into Blood and Juices, but also, if necessary, the Restitution of the Digestion, and Elaboration of the Chyle by Emetics, gentle Purgatives of a saline aperient Nature, and bitter Stomachics.

These Evacuations are frequently stopt, by Obstructions and Infractions of the vascular Substance of the Anus in Men, and the internal Part of the Uterus and Vagina in Women; in Consequence of which they admit no Blood however strongly propelled

pelled to them. In these Cases forcing Remedies are not only superfluous, but pernicious, unless the indurated and inflected Vessels are previously relaxed and softened, by proper Medicines. And this Intention can be neither more speedily, nor efficaciously answered, than by Baths and Fomentations, or Vapour-Baths, so contrived that a Vessel full of warm Water, impregnated with Mugwort, Penny-royal, and Chamomile Flowers, may be placed under the Abdomen in such a Manner, that the Steam may ascend, and penetrate into the Uterus and adjacent Parts. This is to be done in a warm Room, with the Patient's Body well covered; and in order to keep the Water warm, red hot Flints are now and then to be put into it. Frictions of the Legs and Thighs with warm Cloaths, especially after bathing with sweet Water, also, contribute very much to the Production of this Effect.

But in Disorders arising from Suppression, a Defect, or Irregularity of the Menfes, or hæmorrhoidal Discharges, nothing is more certain, safe, and effectual, than a prudent Use of proper mineral Waters: By these all the Intentions of Cure are excellently answered; for by drinking these Waters, the viscid Humours are attenuated and evacuated, and the Obstructions of the capillary Vessels removed, whilst by Bathing in others, the Stricture of the Parts is removed, and the Vessels so enlarged, as readily to admit the Blood, and again discharge it.

As in Medicine 'tis a difficult Task to keep the menstrual Discharges in due and natural Order, so it is still more difficult to manage the hæmorrhoidal, when a large Quantity of Blood attempts its Discharge by the Veins of the Anus, but does not find them disposed for its Evacuation; but the Discharges of this Kind are most powerfully promoted, by Pills prepared of Aloes, which by their highly subtil, resinous, and sulphureous Particles, not only excite a violent Orgasm in the whole Mass of Blood and Humours, but also by stimulating the Coats of the Colon and Rectum by their tenacious viscid and resinous Parts, excite a greater Afflux of Blood to those Parts: Yet when the Blood, after it has arrived here, cannot make its Way through the Vessels, it partly protrudes them, like so many Tubercles accompanied with Pain, and partly stagnating between the nervous Coats of the Intestines, and pressing them, produces violent Inflammations, Spasms, and other terrible Disorders of the Abdomen. A Discharge, therefore, of Blood from their Vessels is to be attempted; by Infusions over a Vessel filled with hot Water, in such a Manner, that the Vapour of the Water may arrive at the Region of the Anus; for by this Means the Vessels are distended, and swell; and then the Parts are to be rubbed with Fig-leaves, or coarse Flannels, in order to solicit a Discharge.

CHAP. XI.

Of VISCERALS.

VISCERAL Remedies, in general, are those which impart Strength and Firmness to the sanguineous Viscera, such as the Liver, Spleen, Uterus, Kidneys, and Lungs; by which Means they are render'd capable of more happily and expeditiously performing their respective Functions. To this Class we may, therefore, commodiously refer hepatic, splenetic, pneumonic, uterine, anti-cachectic, anti-hydropic, anti-icteric, anti-hysteric, and anti-phthical Medicines: But the most considerable Viscerals are, the Roots of Gentian, long and round Birthwort, Succory, Zedoary, Fern, true Rhubarb, and Rhapontic, Turmeric, and Rest Harrow, Peruvian Bark, Winters Bark, the Bark of Tamarisks, the Ash, and Capers, together with Cloves, the Herbs Wormwood, the lesser Centory, Fumitory, Cardus Benedictus, Marsh Trefoil, Golden Trefoil, Baum, Spotted Lungworth, Spleen Wort, Agrimony, Horehound, Dodder, Pauls Betony, Scabious, Spurge, Maidenhair, and Mouse Ear. The Viscera are, also, excellently strengthened by some of the resinous Gums, such as Myrrh, Aloes, Bdellium, the Gum of the Ivy-tree, Gum Ammoniac, Olibanum, Sagapenum, Opponax, and Afa Fetida. Some Minerals are, also, excellent Viscerals, such as the Flowers of pure common Sulphur, Filings of Steels, and all Preparations of that Mettal. Some Chymical Preparations are, farther, powerful Viscerals, such as the Salts of Herbs ob-

tain'd by Incineration, the Terra Foliated Tartari, Cream of Tartar, Sal Polychrestum, Antimoniated Nitre, Spirit of Sal Ammoniac, the Tincture of Mars extracted with Spirit of Wine, the Tincture of Tartar, the Tincture of Antimony, the Elixir Proprietatis, the Essence of Soot, and others of a like Nature. To the Class of Visceral Medicines, also, belong Mineral Waters, especially such as contain a certain subtle Chalybeate Principle, such as those of *Pyrmont*, *Spaw*, and others; and much more those which contain a large Quantity of a Chalybeate Principle.

The *Balsamic Viscerals*, partly by a sulphureous, Balsamic, and somewhat fixed earthy Principle, and partly by their alkaline, sulphureous, saponaceous, and bitter Quality, perform their Operation upon the Viscera, whose Vessels are obstructed and infarcted by gross and viscid Humours, by inciding and dissolving the tenacious Juices, and at the same time procuring a due contracting and elastic Force to the Vessels, and Fibres of the Viscera, which had lost their Strength and Tone. Hence they are of great Efficacy, both for the Prevention and Cure of those Chronical Diseases, which arise from any Disorder of the Viscera.

Though all the Viscerals agree in this, that they strengthen the Tone of the Viscera, and remove Infarctions and Obstructions, yet it is necessary to vary them according to the Diversity of the Viscera affected, and

and the Diseases thereby produced ; thus, for Instance, if the Liver is obstructed, and a Jaundice, Cachexy, or Scurvy produced by that Means, the most efficacious Viscerals are those possessed of a certain saponaceous and deterfive Bitterness ; such as the five aperient Roots, Rhubarb, Turmeric, Opoponax, Bdellium, Venice Soap, Elixir Proprietatis prepar'd with an Acid, and all good Preparations of Steel. When there are too great a Relaxation and Infarction of the Lungs, and the Diseases by that Means produced are present, Myrrh, Gum Ammoniac, Flowers of Sulphur, *Pauls* Betony, Scabious, Chervil, Lungwort, Mouse Ear, Horehound and Maidenhair, are generally thought most efficacious. When the Spleen being preternaturally large and infarcted with Blood, favours the Generation of an impure Blood, and especially of a Cachexy, the Barks of Tamarisk and Capers, Fumitory, Spleenwort, Dodder, Spurge, the Roots of Restharrow, and Chalybeates, are preferable to other Remedies. When from a too weak and relaxed Tone of the Kidneys, Nephritic Pains and Stones are formed, the Bark of the *Egyptian* Thorn Root, and an Infusion of it, as also Preparations of Houndstongue and Juniper, are in a peculiar Manner efficacious. From a weak State of the Uterus, and its Vessels, and a slow Circulation of the Blood and Humours, arise numberless Chronical Diseases, which are efficaciously

cured by long and round Birthwort, Mugwort, Myrrh, Feverfew, Galbanum, Bdellium, Opoponax, Amber, the fetid Pills, and other prepared in the same Manner. If the Intestines and their Glands, the secretory and excretory, biliary, pancreatic and lacteal Ducts, are so deprived of Strength, that by a copious Defluxion of Humours, excessive Fluxes are produced, or if the Humours stagnating in the Vessels lay a Foundation for febrile Motions, and Paroxysms, Rhubarb, *Peruvian* Bark, Winter's Bark, Cascarella Bark, and the most subtille Crocus and Essences of *Mars*, are found more efficacious than any other Remedies.

With respect to Corroboratives in general, it is to be observ'd, that they produce far better Effects, if not only before their Exhibition the redundant Blood is lessen'd, and the Sordes of the *Primæ Viæ* are evacuated by proper Laxatives, but if also, in order to render the Humours more fluid, they are exhibited in Decoctions or Infusions, or which is still better, with Medicinal Waters, or Whey ; by which Means, the Operation of these Corroboratives, which are of an astringent Nature, is greatly assisted in removing violent chronical and inveterate Disorders ; especially when their Use is for a considerable Time persisted in, with proper Exercise, whether by Riding or Walking.

C H A P. XII. Of ASTRINGENTS.

ASTRINGENTS are very proper to restore a Tone and Elasticity to the animal Fibres, when debilitated by Diseases, Intemperence, or Accident. But these are very seldom proper without a previous Attenuation of the Juices, and a Course of deobstruent Medicines, because Obstructions are more firmly rivetted, and the viscid Juices circulate with more Difficulty, when the Diameters of the Vessels are contracted by Astringents.

Among the several Classes of Corroborative Medicines, that of *Astringents* is none of the least considerable and important. The several Substances which come under this Denomination, are also by the *Latins* styled *Vulnerary*, and by the *Greeks*, *Traumatic* Medicines. Their Virtue in general consists in a certain fixed, and gently constrictive Principle, by Means of which they brace up the Parts and Fibres that are too much relaxed, corroborate those which are weakened, and consolidate and agglutinate such as are corroded and wounded. The principal Medicines belonging to this Class are, the Roots of the Avens, Tormential, Bistort, the greater Consound, Bugle, Saracen's Consound, Gooseberries, Agrimony, St. John's Wort with its Flowers, Yarrow with its Tops, Horsetail, *Pauls* Betony, Strawberries, Vervain, Mouse Ear, Male Speedwell, all Sorts of Plantain, Oak-leaves, *Jerusalem* Oak, Baum, Mint, Betony, and Lamium or the dead Nettle, the Flowers of Roses, Balaustines, the *Peruvian* Bark, that of Pom-

granates, and of the Root of the *Egyptian* Thorn, *Japan* Earth, Dragons Blood, Hurtleberries, and Quinces. Of *Spices*; the Nutmeg, of *Mineral Substances*, the Bloodstone, Alum, and all Species of Earths and Marles; and many *Preparations*.

The several Substances now mentioned operate by Means of a considerable fixed terrestrial Principle; in Conjunction with an Acid: And as by constricting the too much relaxed Fibres, they free them from a Congestion and Stagnation of Humours, so by bringing them into a nearer Contact with each other, they promote their Consolidation, and Coalescence. But this constrictive Virtue is not equally strong and powerful in all the Substances we have mentioned; for in the Tormential Root, in the Bistort Root, and its Extract, in the Balaustine Flowers, the Pomgranate Bark, the Oak-leaves, the Alum, the Juice and Bark of the *Egyptian* Thorn, Quinces, and dried Hurtleberries, this astringent Quality is much stronger, than in what we commonly call the *Vulnerary* Herbs, which consisting of a subtile, earthy, and alkaline Principle, intermixed with Particles of a sulphureous, balsamic, and somewhat fixed Nature, operate more safely and mildly, and are of singular Use and Advantage in the Practice of Physic. But that these *Vulneraries*, as well as the stronger and more powerful Astringents, contain a Principle of a subtile, dissolvable and earthy Nature, is plain from this, that rich Infusions of them, upon the Admixture of Vitriol of Mars,

or even of any Chalybeate Liquor whatever, become black, and assume an inky Colour; just as they wou'd do by the Addition of Galls.

If Skill and uncommon Caution are required in the Use of any Medicines whatever, they are certainly so in the Administration of *Astringents*; for since not only the Soundness of the Body in general, and of all its several Parts, but also Life itself, is maintain'd and preserved by the perpetual progressive and circulatory Motion of sufficiently attenuated and fluid Humours, thro' the Structure of the Body, which is almost entirely vascular, and compos'd of inconceivably minute and slender Ducts, and since, at the same time, such are the Natures, and Properties of *Astringents*, as to inspissate our Fluids mixed with them, and brace up the Pores and Ducts of our Solids, 'tis therefore obvious, that Remedies of this Class must be unfriendly, to the very Natures and vital Motions of animal Bodies; for which Reason they are not so safe and secure as some may imagine, unless when used with the utmost Care and Circumspection: For daily Experience convinces us, that Medicines of an *Astringent* Quality, rashly and unskilfully applied for stopping Hæmorrhages, or Fluxes, produce numberless fatal Consequences, and generally bring on slow Fevers, Cachexies, Ædematous Swellings, Spasmodic Disorders, Cholics, and Hypochondriacal Indispositions: For this Reason we are carefully to avoid the imprudent and immoderate Use of the *Peruvian Bark*, for carrying off the Paroxysms of intermittent Fevers. Since by its Astringency, the viscid bilious and salival *Sordes*, lodged in the *Primæ Viæ*, and which ought to be discharged, are so much the longer confin'd and retain'd, by which Means a still more formidable Disorder is sometimes brought on.

If Necessity should at any time call for the Use of Astringents of this Nature, they are not to be administered all at once; but successively, in gentle Doses, and in Conjunction with a sufficient Quantity of some proper Liquid; prescribing at the same time, a due Degree of Exercise.

'Tis highly unsafe and dangerous to repress excessive Vomitings, Discharges of bloody Urine, Hæmorrhages of the Nose, Uterus, or Anus, and Spitting of Blood, by Means of Astringents; since the Patients are always sure to suffer by such a Practice, unless the Spasms on which these Discharges of Blood for the most Part depend, as much as Effects do upon their immediate Causes, are first soothed, the violent and impetuous Motions of the Fluids checked, and the exorbitant and preternatural Affluence of Humours, derived to other Parts.

The traumatic or vulnerary Herbs, and Decoctions of them, are of very singular and uncommon Service, not only in Wounds, Erosions, and Solutions of Continuity, but also in some Diseases of a chronic and violent Nature, such as a Phthisis, Scurvy, Cachexy, and Disorders arising from the Stone, when these Indispositions draw their Origins from a preternatural Stagnation of the Juices. But we ought at all Times carefully to avoid using them, in Cases when there is too great an Obstruction of the Vessels, a Constriction of the Fibres, or in a Phthisis, when the Lungs are full of hard Tumours and Tubercles. However in other Cases, Infusions of vulnerary and gently astringent Medicines, are of singular Service and produce excellent Effects, especially in preventing fabulous and stony Concretions in the Kidneys, which for the most Part arise from an Exulceration or Relaxation of these Organs. This Intention

is, also, very well answered by Infusions of Yarrow and its Tops, of *Pauls Betony*, Ground Ivy, Strawberries, Agrimony, and the Bark of the *Egyptian Thorn Root*. In involuntary Discharges of the Urine, arising from too great a Relaxation of the Sphincter Muscle of the Bladder, whether in Children or Adults, Infusions of this Nature produce very happy Effects, applying externally, of the same Time, rectified Spirits at Wine.

In Cases where the external Parts are hurt or wounded, well rectified Spirit of Wine proves by itself, a noble and efficacious *Vulnerary*, since it puts a speedy Stop to Defluxions of the Blood and Humours, and is of singular Service, where the more sensible Nerves, and tendinous Parts, have suffered by a too great Effusion

of Blood; for spirituous Liquors not only coagulate the Juices of the human Body, as we find by making the Experiment upon Blood and Lymph, but also by removing the superfluous Humidity, render the Fibres tense and rigid; and by bracing them more strongly up, prevent Stagnations. Nor is the spirituous Water called *L'Eau de Arquebuse*, or *Aqua Sclopetaria*, a despicable *Vulnerary*, (in the Opinion of *Hoffman*) since it is prepared by Distillation in *Balneo Mariæ* from some of the best *Vulnerary Herbs*, and Wine: But its Virtues and Efficacy are to be ascribed to the Spirit and the Wine, rather than to the Herbs, whose Virtues are lodged in a fixed earthy Principle, which does not come over the Helm of the Still.

C H A P. XIII.

Of HEATING MEDICINES.

THAT the Natures and Qualities of the several Medicines coming under this Denomination may be more thoroughly understood, it is necessary to observe, that there may be Heat without the external Application of Fire; and that it discovers its Presence by numberless Effects, but in no Case more conspicuously than by the Dilatation of the Fluid in the Thermometer. The Means, then, by which Warmth is generated in Bodies, are the very same with those by which apparent Fire is produced: Where there is Heat, there also is a proportionable and correspondent Motion and Agitation of the Parts of the Body said to be hot; and, *vice versa*, where there is an Agitation of the

Parts there is a proportionable Heat, or Warmth.

Motion consider'd in an abstracted and metaphysical Light, does not generate Heat, since a Body moving *in vacuo* can never produce any such Effect; so that Warmth must be originally owing to a brisk and lively Attrition of such Bodies, as are naturally susceptible of Heat, and capable of communicating it. The Generation of Heat in Bodies, and its several Degrees, are determined by three mechanical Axioms, the first of which is,

That the more dense the Matter is, the Degree of Heat generated is proportionably the greater: For by the Laws of Mechanics, if two Bo-

Bodies move with an equal Degree of Velocity, the Effects produced by them will bear a direct Proportion to their respective Densities, or Quantities of Matter.

Secondly, The greater or stronger the mutual Pressure of the Parts of one Body upon those of another is, the Heat generated is, *ceteris paribus*, proportionably the more intense: Thus two Plates of Iron gently and slowly moved upon each other, do not produce the same Degree of Heat, as when the Attrition is stronger and brisker.

Thirdly, The denser Bodies are, the stronger their mutual Pressure, and the quicker their Motions, the greater is the Degree of Heat produced; for in Proportion as the Velocity is increased, so the mutual resistance between the Body mov'd, and that which may be said to sustain the Motion, is augmented.

From these Considerations we come to understand, why such human Bodies as are dense, hard, ponderous, robust, accustomed to Exercise, and abound with compact Humours and Juices, are always found not only warmer, but also require a larger Time to become cold, than others, since such Bodies by a vigorous Application of the Solids to the Fluids are render'd dense by Compression, may reasonably be supposed not only to generate a greater Degree of Heat, but also to retain it longer than Bodies of an opposite Make, or in an other State. Hence, also, we understand, why the internal Parts of Carcases deprived of Heat, grow cold very slowly; whereas their external Parts become so very soon. On the contrary, 'tis obvious that lax, soft, languid, and weak Bodies, can never excite an extraordinary Degree of Heat in their aqueous Humours, because the Attrition of their Parts being weaker, their Fluids must be less dense, and the Surfaces of

their Parts the more lax, and consequently less capable of retaining the generated Heat. *Aristotle* was well apprised how much the Density or Thinness of the Blood, flowing in the Vessels of Animals, contributed to generate or produce Heat in their Bodies, as is obvious from the following Passage *Lib. 2. Cap. 4. de part. Animal.* "That Blood, says he, "which is too much diluted is cold, "and consequently cannot become "hard: But those Animals whose "Blood abounds with a great Number of gross thick Fibres, have "more of an earthy Principle in their "Constitutions, and are fierce, wrathful, and furious; for Rage begets "Warmth, and solid Bodies, and "all Substances of a firm Texture, "when become hot, warm more "powerfully, than such as are of a "moist and humid Nature. Now "the Fibres of such Animals are "solid and of a terrestrial Nature; "so that by Rage, Fermentations, "and preternatural Heats are excited "in the Blood. Hence it happens "that Bulls and Boars are of a fierce, "a wrathful, and furious Disposition, because their Blood abounds "more with solid Fibres, than that "of some other Animals." For the Mass of Blood consists not only of red Globules, such as come more strictly under the Denomination of Blood, but also of Serum, in which these Globules swim; and the larger the Quantity of Serum is, the thinner and more diluted the Mass of Blood must of course be, and *vice versa*. On the other Hand, the thinner the Blood is, the more faint and weak the Attrition caused by its Motion must be, and the weaker its Attrition is, the smaller the Degree of Heat generated must be; therefore the thinner the Mass of Blood is, the fainter the Heat produced by it must be, and *vice versa*. Hence the Reason is obvious, why Men of hardy, robust

bust Constitutions, who have their Vessels fill'd with a thick and rich Blood, are more subject to burning Fevers, and inflammatory Disorders, than those of lax and weak Constitutions, whose Vessels contain a thin and much diluted Blood. Hence, also, appears the Reason, why Venesection is the most infallible Method of diminishing the Heat of the Body, because by lessening the Quantity of the Blood, its Attrition in the Vessels, on which the Density of the Humours depends, is proportionably lessen'd. But to consider the Method by which Heat is generated and increased in the human Body, a little more accurately: The Blood itself is a Body; the Heart also, and the Arteries are Bodies, and consequently the Heart cannot contract itself without pressing upon the Blood, and this pressure is continued by the Arteries. When a Body moves thro' a Cylinder, the Attrition produced is little or none at all; whereas when the same Body moves from the Base towards the Apex of a conical Canal, it must strike against its Sides: Hence arises a Repercussion and consequently an Attrition. Now the Arteries of our Bodies are such conical Canals, and consequently resist the Impression of the Blood; therefore an Attrition must necessarily be produced; and by natural Philosophy we are taught, that where there is Attrition, there also must be Heat, so that there can be no Heat in the human Body, and what is produced by the Circulation of the Fluids; and when this Circulation is stopped, the Heat is of Course destroyed. Hence the Degrees of Heat in a human Body, are most properly estimated by the Pulse, since the best Pulse denotes an equable Heat, diffused thro' all the Body; whereas the Pulse preternaturally increased or diminish'd, indicates a proportionable Increase or Diminution of Heat. Hence the

Reason is obvious, why the arterial Blood of the Brain is the coldest of any, since in the Arteries of the Brain, the Systole and Diastole are very faint and languid, because upon their entering the Cranium, they lose their muscular Coat. This Observation, for the same Reason, holds true with regard to the Blood in the Bones. The muscular Coat of the Arteries, produces a proportional Pressure of the Parts of the Blood upon each other: Hence arises Attrition, and this Attrition ceasing or being diminished, the Heat accordingly ceases, or is impair'd. From these Circumstances we are able to account for the arterial Blood being hotter than the venous Blood, since in the Arteries the Blood is always carried from wider to narrower Parts, where the Resistance, the Pressure, the Attrition, and consequently the Heat, are increased; whereas in the Veins the Blood is carried from narrower into wider Parts, where the Resistance, the Pressure, the Attrition, and consequently the Heat, are diminish'd. The Reason why some Men, otherwise in a good State of Health, who faint away upon seeing Phlebotomy perform'd, first become cold at the Extremities, is, because in these Parts, the Humours first begin to stop. Since, then, all the Heat in a human Body is produced by the Motion of the Fluids, and since the Excess of Heat, bears a just Proportion to the Attrition of the moving Fluids with themselves, and with the Vessels in which they flow, it is hence obvious, that whatever increases the Velocity of their circulatory Motion, must of Course augment the Heat of the Body; so that by Motion and Exercise alone, the Degrees of Heat are not only increased in a human Body, but also bear a Proportion to the Velocity of that Motion, whether it be running,

or any other Kind of Exercise. The Reason why *Hippocrates* in the sixteenth Aphorism of his first Section asserts, that in Winter and the Spring the Belly is naturally hotter than at other Seasons, is, because at these Times the Blood flows thro' the Vessels braced up, and render'd narrow by the Influence of the external Cold; for if the same Quantity of any Liquid is to move thro' a Vessel or Canal, narrower by one Half than the Vessel it formerly moved in, it will flow quicker by one Half than it did in the other; hence its Attrition, and consequently its Heat, must be increased. "The Circulation of the Blood according to *Hoffman* in *Med. Rat. Syst.* is the immediate and productive Cause of Heat in the human Body; and all Substances which increase this Circulation, produce correspondent Degrees of Heat in it; whereas such Substances as retard its Motion, of Course proportionably impair its Heat." From what has been said it is obvious, that under the Denomination of heating Medicines, all such are to be rank'd, as increase the Velocity of the Circulation, and produce a greater Pressure of the Vessels upon the Fluids; since upon this Circumstance depends the Density of the Humours, which, as it is the principal Cause, so also may it prove the Effect of an increased Degree of Heat. Among the Medicines of this Kind we may reckon:

Stimulating Substances, among which are the four greater hot Seeds of Anise, Caraway, Cumin, Fennel; the four lesser hot Seeds of Bishops weed, Stone-parsley, Smallage, and wild Carrot.

To this Class also belong Astringents, and such Substances as block up the Pores externally, such as immoderate Cold, a heavy Air, cold Water, tight Cloths, or thick Bedcloaths.

Among such things as increase the Heat of the human Body, we may also reckon muscular Motion, and principally Frictions.

In the last Place, to this Class belongs external Heat, whether occasioned by the Fire or the Air; to which we may, also, refer the warm Atmosphere immediately surrounding the Body itself, when depriv'd of all Communication with the adjacent cool Air; when, for Instance, the Body being cover'd close up in Bed, becomes gradually warmer by the Heat exhaled from itself. According to *Celsus* L. 1. C. 3. "The Degrees of Heat are increased in the Body by Unction, by Salt Water, especially if hot, by all saline Substances, and by austere Wine". The Distinction of heating Medicines according to their several Degrees, seems to bear an Air of Absurdity in it, since these Degrees cannot be absolutely determined, but are merely relative to the several Constitutions to whom such Medicines happen to be exhibited. As for Heat externally applied to the Body, 'tis to be observ'd, that a dry Heat is more proper for generating Warmth in the Constitution, than a moist one; since the latter at first excites the Sensation of Heat, but afterwards augments the Cause from which the Sense of Cold proceeds, by relaxing the Vessels, diminishing their Resistance, and consequently impairing the Pressure which ought to be made upon the Fluids. In this Sense we are to understand *Hippocrates*, when in the sixteenth Aphorism of his fifth Section he asserts, that "Too frequent an Use of hot Substances is attended with Tenderness of the Flesh, and Weakness of the Nerves."

Old Persons, and People of winter'd, dry, and rigid Constitutions, seem to be proper Exceptions to this Rule, since in Consequence of the

Relaxation to be expected from a moist Heat, the Passages of the Humours thro' their capillary Vessels, are render'd more free and open. The Health of such Patients is, according to *Vallesius* in his *Philosophia Sacra*, most effectually consulted by following the Example of pious King *David* in the like Circumstances. *Langius*, in the twelfth Epistle of his first Book, among the Fomentations which afford the most kindly Warmth, reckons a young Puppy, or a little Boy laid in the Bosom of an old Man, and immediately subjoins: Thus when *David* was seventy Years of Age, and his native Heat so much exhausted, that he could not become warm by any other Means, he, by the Advice of his Physicians, got *Abisbagh* the lovely *Shunamite*, to sleep in his Arms, that the decay'd Strength of his Stomach might be restored by the kindly Warmth imparted by the blooming Lady.

When the Parts are refrigerated by the external Air, provided they are not become quite rigid by the Excess of the Cold, and the Blood is still capable of circulating, they are restored to their former Vigour, by being first immersed in cold Water, and afterwards besprinkled with it, upon which they begin gradually to conceive a genial Warmth.

From what has been said it is obvious, that heating Medicines are not only proper, but necessary when thin and diluted Humours are to be inspissated; where the solid Parts become flaccid, are to be render'd tense; and where the Circulation of the Juices is either to be promoted when stopt, or accelerated when too faint and languid; the Pulse of the Patient, in the mean Time, directing the Physician how far to carry on his Design: So that heating Medicines carefully applied, must be a-

dapted to what we call cold Constitutions, to such as abound with a recrementitious Mucus, to such as are too much relaxed, to the Leucophlegmatic; and consequently to such as are afflicted with œdematous Tumors. But they who practice Physic ought to take due Care, that heating Medicines be exhibited gradually, and that the Body be not warmed by their Influence all of a sudden; lest by that Means, the Fluids stagnating in the flaccid Vessels, should be too hastily driven into the capillary Vessels, and there form the most dangerous Obstructions. A Man; for Instance, who by being long accustomed to a sedentary Life, and a Want of due muscular Motion, is become pale, and has acquired a flaccid State of all his Fibres, when all on a sudden he uses any violent Motion, or takes large Doses of intensely hot Medicines of the more stimulating and acrid Kind, he immediately begins to breath with Difficulty, and to be in Danger of a Suffocation, in Consequence of the Humours moving too violently thro' the Vessels, as yet too lax, and unable to make a mutual Resistance to the Impulse of the Fluids, which of Course rush into the capillary Vessels, and distend them, sometimes to such a Degree as to burst them, and occasion a Discharge of their Contents. Accidents of this Nature happen not only in cachochymic Habits, which abound with acrid and viscid Humours, but also in plethoric Constitutions, where the Juices are good, but move in too slow and languid a Manner. But as a temperate Heat is absolutely necessary for the Preservation of Life and Health, so, as we are told by *Hoffman* in his *Med. Rat. Syst.* if this Heat is increased beyond its due Degree, an irreparable Loss of the finer Fluids is sustain'd, and all those Disorders

are brought on, which draw their Origin from the Juices being too much inspissated, or render'd acrid by the Diffipation of their diluting, balsamic, aqueous Parts. According to *Hoffman* in *Med. Rat. Syst.* "Heat generates Salts in the Juices of Animals; for which Reason, when the Heat is increased, as happens in Fevers, the Urine contains a larger Quantity of Salts, and is of a deeper Colour; whereas the more moderate the Heat of the Body is, which is generally the Case with those habituated to a Life of Ease and Temperance, the fainter the Colour of the Urine is, and the smaller Quantity of Salts it contains." From this Passage we learn, that a Change in the State and Condition of the Urine, is another Sign of the Heat of the Body being increased or diminish'd; by which, as well as by the State of the Pulse, the Physician ought to be directed in the Use of heating Medicines. From what has been said it is obvious, that the Use of hot Substances is prejudicial in rigid Bodies, where the Juices move quickly, and with a considerable Force; and consequently that they must absolutely be abstain'd from in feverish Heats, and acute inflammatory Disorders. According to *Hoffman* in his Treatise last quoted, "Hot Substances, and such as agitate the Blood too violently, easily convert a mild Humour into Poison, and a mild Disorder into one of the malignant Kind." He, also, advises young Men, and such as are in the Vigour of their Age, to abstain as much as possible from such Substances as are hot, or have a Tendency to throw the Blood into Commotions, lest by such a Piece of Imprudence, they should be suddenly carry'd off by inflammatory

"Disorders." That heating Medicines ought to be sparingly and cautiously exhibited to Infants, is also obvious, since their Juices are easily put into Motion, and their Vessels soon irritated; for, according to *Hippocrates* in the fourteenth Aphorism of his first Section, they who are in a growing State, contain a great deal of innate Heat. Now that heating Medicines perform the various Offices of Corroboratives, Resolvents, and Discutients, is sufficiently obvious to any one that considers, that the Fibres, the Membranes, and the Blood Vessels, derive a certain Tone, and elastic Force, from heating Substances, by which Means the Circulation of the Juices is render'd brisk and lively. But that an Excess of this Heat, renders People weak and languid, is a Truth confirm'd by Experience. The Reason of it seems to be, that the thin and aqueous Humours of the Body, being too much exhausted, the Blood of Course will be deprived of the Matter destin'd by Nature for the Reparation and Nourishment of the Solids. The incomparable *Boerhaave*, after making repeated Experiments, by Means of *Fahrenheit's* Mercurial Thermometers, in order to determine the greatest Degree of Heat the human Body could endure or breath in, affirms, that the vital Heat in Men amounts to ninety-two Degrees, whereas in Children it often amounts to ninety-four, that a Man is always hotter than that Portion of the Atmosphere which surrounds him, and that he cannot bear a Heat in his Body, greater than an Hundred and a few odd Degrees, without a Cessation of the Circulation, and Death; in which Case the Injury is first discover'd by a Depravation of the several Actions of the Head, and Lungs.

The Learned have contriv'd many Instruments to measure the Degrees of Fire, or Heat. But for those who are studious of great Exactness, the best seems to be *Fahrenheit's* Thermometer describ'd by *Boerhaave*. It consists of a glass Tube with a Bulb at the lower End, fitted to a Brass Plate, on which the Degrees are mark'd from

one to six hundred. In the greatest Degree of natural Cold, the Mercury subsides to one, and rises to two hundred and twelve in a Degree of Heat sufficient to make Water boil; and to about six Hundred in one capable of melting the more easily fusible Metals, and boiling Oil.

CHAP. XX. Of TOPICS.

WITH Respect to external Applications, they are used in various Intentions; as to stimulate the Skin and raise Blisters, in which case they are called Sinapisms, or Vesicatories: To induce an artificial Sphacelus, and destroy the Part to which they are applied; and these are called Caustics: To strengthen relaxed Parts, as is the Case in Astringents: To mollify hard and contracted Parts, as when Emollients and Relaxers are apply'd: To repel Humours: To attenuate Humours stagnated and concentered in any particular Part: To dispose these to Suppuration; and to deterge and clean Wounds, and Ulcers, and remove the Obstructions to their healing.

In order to understand how these operate, it will be necessary to consider the Action of Heat, or Fire; and of Cold. Heat, therefore, produces Effects very different, in different Degrees.

Thus in a small Degree it relaxes the solid Parts of the Body, and attenuates the Fluids subjected to its Action, producing that agreeable Sensation which we call Warmth. And this Effect increases with the Degree of Heat, to a certain Point.

And after this it begins to excite a painful and disagreeable Sensation; to destroy the Solids; and to coagulate the Fluids contained in them; and this Action increases *ad infinitum*, in Proportion to the Increase of the Heat, or Fire.

Cold, on the contrary, contracts, and braces up the solid Parts, and coagulates the Fluids; and therefore, when the Effects of Heat begin to be disagreeable, Cold conveys a pleasing Sensation, which we name Coolness. In a greater Degree it becomes uneasy, and begins to retard the Motion of the Humours thro' the containing Vessels, both on Account of its Action upon the Solids, and Fluids; and ultimately it induces a true Gangrene and Sphacelus; as is evident in Animals, and their Parts, subjected to the Influence of severe Frosts.

Now it seems just the same, with respect to the Effect, whether actual Fire operates immediately upon the Body, or whether such Substances are applied to it, as excite Fire, or Heat in the Part, by what Means soever.

We are, also, farther to consider, that when any Tumor is form'd by a Stag-

Stagnation, and consequent Inspissation of the Juices, if any moisture is applied to the Surface of the Part, which is capable of entering the Pores, and mixing with the stagnant Fluid, this will, by diluting it, dispose it to move forwards in the Vessels, and return into the Mass of Blood; or supposing the Fluid extravasated, and stagnated in the cellular Membrane, Dilution will dispose it to enter the absorbing Vessels, and facilitate its Reconveyance by the Veins, to the Mass of Humours, and thus exonerate the Part offended.

Relaxation will be another Means of promoting the Resolution of any coagulated or coagulating Humour, either in or out of the Vessels, as by Relaxation the Diameters of the Vessels of all Sorts are enlarged, and consequently rendered more capable of conveying Particles, which, during a State of Restriction, could not move forward; at the same time that the same Relaxation affects the Fluids, and disposes them to a greater Fluidity.

Farther, was it possible to convey the Particles of any Substance to the stagnating Juices, even without Heat, which would render them more fluid, or as it is usually expressed, would attenuate them, these would dispose them to move forwards in the Circulation, and would be a great Step towards Resolution.

Astringent Applications, tho' directly opposite to those of the relaxing Kind, yet may promote the salutary End of Resolution, as it were, by Accident; because by increasing the Strength of the solid Vessels, their contractile Power is augmented, and consequently the Force by which they propel the Fluids forwards, in their Cavities; insomuch, that sometimes in recent Inflammations, when the Disease has not made too great a Progress, this a-

lone has been found capable of bringing about a Resolution.

Now in Case of an inflammatory Tumor, Cold and Astringents will contribute to repel the Disorder, by increasing the contractile Power of the Part, with the Effects last mentioned; and strengthen it in such a Manner, as to exclude all farther Influx of Humours to the Part. On the other Hand, a moist and gentle Heat, equal to, or somewhat surpassing that of tepid Water, will have all the good Effects of such a Heat, and Moisture, as Dilution, Relaxation, and Attenuation. But a somewhat greater Degree of Heat, will excite Suppuration, or a Putrefaction of the stagnating Juices, and of the solid Parts, in which the Circulation ceases to be carried on. But a still greater Degree of Heat, causes the Epidermis to separate from the true Skin, and rise in Blisters as if scalded; and one a little more intense, induces a true Gangrene and Sphacelus.

Hence it seems highly probable, that if we could always determine the exact Degree of Heat necessary to answer the Intentions of Resolution, and Suppuration; and could with Certainty regulate our Applications accordingly, we should not so frequently be disappointed in our Expectations; and find Matter formed, where we intended to discuss, and *vice versa*.

I cannot omit taking Notice of Vinegar, as a Topic; because many People erroneously imagine, that it coagulates the Juices; whereas in Fact, there is scarcely any known Substance that attenuates more, and in a greater Degree disposes coagulating Juices to Fluidity.

The late Dr. Friend, in his History of Physic, seems to be of Opinion, that Oils prevent Resolution, by clogging and obstructing

the Pores. But as we are not to be governed in Practice by Authority, but by Facts, it is worth while to consider, that the Poison conveyed by the Bite of a Viper coagulates the Juices, from the Part wounded even to the Heart, in Animals that die of it; and that by rubbing Olive Oil into the Part, this Coagulation is prevented, and the Animal is cured. And I see no Reason why we are not to believe it may prevent Coagulations of the Blood from other Causes. If we examine the Practice of the Antients, we shall find, that it turned much upon Unctions, especially in Disorders arising from Stricture, that is, in Inflammations: And even People in a perfect State of Health, frequently employed Unguents, after relaxing the Skin by Bathing. Now 'tis highly probable, that this was not done wantonly, and without Design; but that they found by Experience, that Unctions prevented the Coagulation of the Juices; and therefore they made Use of them not only as a Cure for, but as a Preservative against Inflammation. And we know that whatever relaxes, is attended with such Effects.

As practical Rules and Cautions, are of infinitely more Consequence in Physic, than philosophial Disquisitions on the mechanical Action of Medicines, I shall oblige my Readers with the following Dissertation on Topics, in the Words of the very eminent *Frederick Hoffman*.

Topics in general include whatever is externally applied to any Part of the Body, and consequently comprehend whatever is laid to Wounds or Ulcers, or any Injuries of the Limbs, whether it consists in the Application of the various surgical Instruments, or in the Use of Ointments, Plaisters, Injections, and Tents. But we shall confine ourselves to the Consideration of

those Topics used in Disorders, which arise from an internal Cause, and consequently belong rather to the Province of the Physician, than of the Surgeon.

Baths, then, for the Head, whether prepared of simple Water, a Lixivium, or Wine boiled with cephalic and emollient Herbs, are often preposterously used by Persons ignorant of Medicine. These are generally prejudicial in all Disorders of the Head, and Weakness of the Brain, or Nerves; but they are in a particular Manner injurious in Achors, Catarrhs, and Ringing of the Ears, Dullness of Hearing, and Inflammations of the Eyes. I have often known an Epilepsy produced by a preposterous Use of Baths for Childrens Heads; and I am of Opinion that we ought totally to abstain from such Baths, and substitute in their room Frictions of the Head, and Substances of a drying, and corroborative Nature; for the above-mentioned Disorders are produced by an impetuous Conveyance of the Humours from the inferior Parts to the Head, and a Fulness and Stagnation of Blood, either pure or serous, in that Organ. Now nothing more disposes the Head to receive the Force of the Humours, and retain the serous Parts of the Blood, than these Baths, which by their hot and tepid Moisture, render the Fibres flaccid, and hinder the congested Humours from returning thro' the Veins. But in all Disorders of the Head, or superior Parts, we are rather to bath and relax the Feet and Legs, in order to make a Revulsion, and Derivation, from the superior to the inferior Parts.

I also condemn the Use of cephalic Plaisters; when, for Instance, the whole Head is shaved, and covered with a Plaister, as is usual in violent Hemorrhages, Epilepsies,

and

and other Symptoms, generally produced by external Causes, such as Contusions or Blows. And tho' some, upon this Occasion, make a Distinction of Plaisters prepared of Balsams and Gums, and those which consist of viscid and glutinous Substances, yet, in my Opinion, both are more injurious than useful. The Reason of this Assertion is: that the freer the Perspiration of the Part affected is, the Cure always succeeds the better. Besides, the farther the Parts are removed from the Heart, the Source of Heat, or the less Blood circulates in them, of the greater Importance it is to promote Transpiration in them. Every one must, therefore, be convinced, that Plaisters must prove prejudicial, by closing the Pores of the Head.

We can, therefore, from Experience recommend in their stead, dry Powders, either sprinkled on the Head, or included in Bags, which by their subtile, mild, and sulphureous Quality, corroborate the nervous or cold Parts, and preserve a free Perspiration. But if dry Powders are contraindicated, we may substitute in their room, Bags, including cephalic Ingredients, boil'd in Wine, or Liniments prepared of such Substances as are possessed of a penetrating Quality, by Means of a volatile oleous Salt, and a balsamic Refin, among which the most considerable are the *Peruvian* Balsam, Camphire, rectified Spirit of Wine, Sal-ammoniac, or volatile Salt of Worms, strengthened by the unadulterated Oils of Lavender, Marjoram, Rosemary, or Nutmegs, and impregnated with Essence of Castor. These Liniments afford great Relief in all Disorders of the Head, whether they partake of the Nature of Convulsions, and Epilepsies, or are accompanied with Pain, and the Interception of any of the Senses.

But my Intention is not to destroy the Use of all Plaisters, which in certain Cases are beneficial, when applied to the Forehead, or Nape of the Neck; but I only speak of those Plaisters which cover the whole or half of the Head. It is, also, to be observed, that frequently powdering the Hair, especially with pounded Starch, is productive of bad Consequences. Thus a Gentleman of Distinction told me, that by the frequent and immoderate Use of such Powder in his Youth, he contracted a Weakness in his Eyes, which at last terminated in a perfect Cataract. Nor is it difficult to assign a Reason for this, since such tenacious Substances, by blocking up the Pores of the Head, greatly obstruct Perspiration, so necessary to the Health and Strength of the Part.

It is a common Error in Practice, to apply various Liniments and Balsams, in most Disorders of the Head, especially a Vertigo, and Head-ach accompanied with a Sense of Weight, a Carus, an Apoplexy, a Torpor of the Senses, and an Hemicrania. Thus it is customary not only to anoint the Nostrials and Temples, but also the Crown of the Head, and Neck, with fragrant Balsams prepared of Musk, Amber, Civet, and Oil of Roses; because these are thought efficacious against Disorders of the Head. But such a Practice is not so innocent as it is imagined; for these are vaporous Medicines, and by their elastic Vaporosity insinuating themselves into the Pores of the Vessels, distend them too much, and in some Measure fix the impetuous Motion of the Blood, and by their sedative and anodyne Quality dispose to Drowsiness. Hence every one must perceive, that we are to deal cautiously with Medicines of this Kind, which are not proper in Disorders of this Nature, where the

Head, and its Vessels, are infarcted and distended by the Impetus and Quantity of Blood. In this Case, by increasing the Expansion of the Humours, and consequently augmenting the Danger of their Stagnation, they are experimentally found to produce Head-achs, Vertigoes, Ringing of the Ears, Drowsiness, and greater Oppression and Torpor of the Mind and Senses. What *Hippocrates*, says in *Apb.* 28. *Sec.* 5. with Respect to Fumigations, holds true concerning these Medicines, which is, that they would in many Respects, contribute to the Production of good Effects, if they did not induce such a Heaviness of the Head. For which Reason, to the Remedies above mentioned, we prefer such balsamic Liniments, as only consist of highly rectified Spirit of Wine, in which Camphire, the Oils of Marjoram, Lavender, and Rue, but not adulterated with Turpentine, are dissolved; for these Substances rather operate by discussing and opening the Pores, than by filling the Head with Vapours, and for that Reason are always safer in Cephalalgias, and violent apoplectic Fits.

We now proceed to the Topics generally used in Disorders of the Eyes; and so great are the Errors committed both by Physicians and Surgeons in this Respect, that we may justly affirm, that more are deprived of Sight by a preposterous Application of these, than by the Violence of the Disorders. Thus it is a vulgar Error, that cold Substances are friendly to the Eyes, whereas such as are hot are prejudicial to them: This indeed holds true when the Eyes are found, in which case it is more expedient to wash them with cold Water, than with warm; because the latter by corroborating the Pores of the Coats and Sides of the Vessels, prevents

an excessive Flux of Blood and Humours, and preserves the Eyes serene, lively, and sound. But this Rule is by no Means to be observed in a preternatural State of the Eyes, especially in an Ophthalmia, in which Case the Use of cold Substances is highly dangerous. Thus *Forestus* in *Obs. Chirurg.* L. 2. *Obs.* 16. gives us an Account of a Woman, who labouring under an Ophthalmia, used a Collyrium of Talc and distilled Water; but soon after her Eyes were seized with such an intense Pain and Heat, that an Ulcer succeeded: When the Eyes have been afflicted with an inflammatory Heat, I have seen them rendered turbid, and the Inflammation so greatly increased, that within a few Days the Sight has not only been obscured, but also sometimes totally destroyed, for want of proper Management; for as in all Inflammations skillful Physicians justly condemn the external Applications of cold, astringent, and incrassating Substances, so I see no Reason why we should admit their Use in Inflammations of the Eyes, whose capillary Vessels are far more tender than those of other Part; for the Cause and Origin of every Inflammation is an Infarction of Blood or Humours, in the larger Vessels, on Account of the Obstruction of the adjacent small Vessels; now Obstructions are by nothing more confirmed, than by Things actually cold, which deprive the Juices of their Fluidity, and render them thick and incapable of Circulation.

In inflammatory Disorders of the Eyes, we not only reject such Collyriums as are actually cold, but also, such as are possessed of an incrassating Quality, or invite a farther Afflux of the Humours to the Part affected; such as all the ophthalmic Waters, the Frogs Spawn Water, for Instance, Rose-water, that of Plun-

Plantain, that with Sugar of Lead, that of Alum, the White of an Egg, red Role, and all mucilaginous Substances. Thus *Foreſtus* in *Lib. 2. Obſ. 26.* obſerves, that oleous and pinguious Subſtances are prejudicial to the Eyes; in Confirmation of which he tells us, that a Barber treated an Ulcer with hot Oil, till breaking into the *Tunica Cornea* and *Uvea*, it at laſt degenerated into a Cataract. Greater Efficacy is to be expected from ſuch Subſtances, which, without any great Acrimony or Heat, are poſſeſſed of a diſcuſſive Quality, among which Camphire is the moſt conſiderable; becauſe, as in all other Inflammations, ſo alſo in this, it affords inſtantaneous Relief. If, therefore, the Inflammation is only ſlight and ſuperficial, Elder flower Water in which a little Saffron is diſſolved, with the Addition of a few Drops of a well ſaturated Solution of Camphire, applied tepid, is of ſingular Service. If the Inflammation is accompanied with a ſaline acrid Lymph, a Mucilage of Quince ſeeds, or Roſe-water, mixed with Saffron and Camphire, are of ſingular Efficacy. But when the Inflammation is violent, deep, and dangerous, the Eye being almoſt deprived of Sight and Senſibility, I have found many happy Effects produced by tepid camphorated Spirit of Wine, mixed with Peruvian Baſam, by which Means the Senſation, Motion, Tone, and Colour of the Eyes, are gradually reſtored.

It is ſufficiently known, that Vitriol, in Conſequence of its partaking of Copper, is among Practitioners reckoned a great Arcanum in Diſorders of the Eyes; but as it is almoſt promiſcuouſly uſed in all Collyriums, great Miſfortunes are ſometimes produced by it. We are, therefore, to abſtain from the Uſe of Vitriol in all Inflammations, and

ſaline, hot, and acid Deſfluxions, accompanied with Redneſs and Itching, becauſe Vitriol by its Acrimony increaſes all thoſe Symptoms. But Vitriol is properly uſed, either when the Humours are thick, and formed into Sordes, or when they begin to form ſmall Membranes in the *Tunica Albuginea*, which frequently happens after the Small Pox and Meaſles. In ſuch a Caſe, therefore, ſurpriſing Effects are produced, by one Grain of *Cyprian* Vitriol diſſolved in one Ounce of Celandine-water, with which Liquor upon a Feather, the Part afflicted is to be touched frequently every Day.

But when a manifeſtly corroding and burning Matter is perceived, temperating, demulcent, and mucilaginous Subſtances are to be uſed; and of theſe the beſt are the Mucilages of the Seeds of Fleabane and the *Sieſ Album* without Opium, as alſo the Powder of Sarcocolla.

With reſpect to the Fat of Vipers, and of the Species of Fiſh called *Umber*, which is ſo greatly extolled in Wounds of the Eyes, and in that Diſorder in their Corners which is generally called the *Pannus*, we are to obſerve, that theſe Fats ought to be recent, ſince when by Age they have contracted a Rancidity, they are not only injurious in theſe, but alſo in all other Diſorders of the Eyes. Beſides, Collyriums are of no Uſe, or rather hurtful, when from a Fault and Dyſcracy of the Lymph and Blood, which often happens in a Scurvy and Lues Venerea, the Eyes are red, painful, dropping and turbid. In ſuch caſes Topics of all Kinds are uſeleſs. We muſt firſt correct the Juices by internal Medicines, which is excellently perform'd by a Decoction of the Woods, and of ſuch Herbs as ſweeten the Blood. It alſo ſometimes happens, that in Conſequence of an inveterate Tumour of the Glands of the Neck,

an obstructed Discharge from the Ears, an Application of Cosmetics to the Face, or the Retropulsion of an Achor in the Head, the peccant Matter fixes its Seat in the Eyes; in this case we are not to trust to Topics alone; but these are to be assisted by internal Medicines, and the Cause of the Disorder must be totally removed.

With Respect to Disorders of the Ears, innumerable Errors are also committed; for nothing is more improper than in a Dulness of Hearing to put Oils, whether expressed, as the Oil of Sweet-Almonds alone, or mix'd with cephalic Oils, into the Ears. Tho' this Piece of Practice is extolled by many Practitioners, yet I have rarely found it productive of good Effects: For a Dulness of Hearing proceeds either from a too great Relaxation of the *Tympanum*, or from an excessive Humidity of the Membrane surrounding the Organ of Hearing, that is the Labyrinth and Cochlea; so that Oils, by producing a greater Relaxation, increase the Disorder; and Oils of an hot, acrid, or too spirituous Kind, produce intense Pain and Heat in that highly nervous and sensible Membrane, which surrounds the auditory Passage. Besides, if we have Recourse to the Observations of the most skillful Practitioners, we shall find that Topics are so far from being beneficial in a Dulness of Hearing, or Ringing of the Ears, that they are rather injurious. Nor do I see by what Means the Virtues of Medicines, whether unctuous, oleous, or spirituous, can penetrate to the Seat of the Disorder, which is within the Brain, or in the most remote Recesses of the *Os Petrosum*; in such Cases I have always observed happier Effects produced by apophlegmatizing and cephalic Substances.

There are, however, some Cases,

in which Topics are beneficial in Disorders of the Ears, when, for Instance, the Ear Wax is so indurated as to assume the Nature and Consistence of a Plaister, and greatly obstruct the Hearing: In this Case tepid Oil of sweet Almonds molifies the indurated Ear Wax, so that it may be commodiously extracted with Ear Picks. I remember some Years ago, a Mountebank pretended to a wonderful Secret for removing Deafness, which consisted of injecting into the Ear, with a Syringe, Fennel-water, into which a little of the Oil of Tartar had been dropped. This Injection he cautiously made several Times a Day, and in some Patients, that is those whose auditory Passage was closed up with the Ear Wax, the Experiment succeeded very well. The like happy Effect is sometime produced by a tepid Injection of mineral Waters into the Ear; but they are only beneficial when the Dulness of hearing proceeds from Sordes too much clogging the Membrane of the *Tympanum*.

As Abscesses sometimes arise in the internal Ears, 'tis to be observed, that these require a particular Treatment, since if they are treated in any other Manner, they frequently terminate in putrid and carious Ulcers, accompanied with a total Loss of Hearing. 'Tis, therefore, a bad Piece of Practice to Use digestive and oleous Ointments, such as those cold dry nervous Parts cannot bear. But such Abscesses are rather consolidated and hindered from degenerating into Ulcers, by putting warm Balsamics into the Ear with Cotton, such as the Tinctures of Myrrh, Opobalsam, and Amber.

The Nostriils have also their particular Topics, which when properly applied, are very beneficial, but no less prejudicial when preposterously

ously used; an Instance of this we have in the great Variety of Things thrust up the Nostrils, in order to stop excessive Hæmorrhages: And tho' the Applications of this Kind are numerous, yet few of them are useful, or even innocent in Practice. For as an Hæmorrhage generally proceeds from an internal Cause, which for the most Part is a Spasm, a violent Constriction, or Obstruction of some Parts remote from the Nostrils, and as the Blood is then impetuously conveyed to the Vessels of the Head, when this Blood is too much congested, it distends the Orifice of the Vessels, and at last breaks the Coats of the Nostrils. Hence every one must perceive, that it is not only in vain, but also dangerous in such Cases, to use external Styptics and Repellents; for closing up the Orifices of the Vessels by Astringents, we derive the Disorder to other Parts of the Head, or perhaps to the Breast, whilst the internal Force of the Blood still remains. But if the open Orifices of the Vessels from which the Blood flows are situated pretty deep in the Fauces, so that the Efficacy of Styptics cannot reach them, and the Nostrils in the mean Time are so stopp'd up, as to afford no Discharge of the Blood, it falls from the Fauces upon the Aspera Arteria, sometimes not without Danger of Suffocation. Besides, as all Styptics are unfriendly to nervous and glandular Membranes, they greatly injure these Parts when thrust far into the Nostrils.

These Topics for the Nostrils are, therefore, of little or no Use, unless we previously derive the Blood from the Head by Venesections, Frictions, and Immersions of the Feet and Hands in warm Wine, or Water; as also by Diaphoretics, which without any great Motion and Heat,

propel the Blood from the Center to the Circumference of the Body; and then there is no Necessity for these cold and styptic Repellents, since the Tincture of *Terra Japonica* alone, received into the Nostrils, is far superior to them all. 'Tis customary among the Vulgar, in excessive Hæmorrhages of the Nose, to apply a Piece of silver Coin wet in cold Water, either to the Forehead, or Nape of the Neck. But these Practices cannot be used in the Beginning of the Hæmorrhages, without Danger of an Apoplexy. We do not, however, disapprove of such Epithems as are at once possessed of a discutient and corroborative Virtue, such as Vinegar of Roses mixed with Nitre, Camphire and Oil of Rose-wood, which Mixture, when applied tepid to the Temples and Neck, is of singular Efficacy, and preferable to all others.

We now come to consider the Topics generally used in those putrid and carious Ulcers of the Ossa Squamosa, which are familiar to those labouring under a venereal Taint, or the Scurvy. The Topics for these Purposes are generally the Water of Roses, Plantain, and House-leek, mixed with red Bole, Sugar of Lead, or Magistery of Lead; or if the Ulcers penetrate to the Bones of the Fauces, or corrode or consume the Substance of the Uvula, Injections or Gargarisms are commonly used. But all these cold Preparations are of no Use, since they are by no Means fit for stopping the putrid, noxious Corruption. Disorders of this Kind require far more powerful and more penetrating Medicines, such as Oil of Cloves, which is an excellent Preserver of the Bones, especially when mixed with *Peruvian* Balsam; *Elixir Proprietatis* prepared without an acid, Essence of Amber, or camphorated Spirit of Wine,

cautiously injected thro' the Nostrils by Means of a Syringe, are also excellent for curing these fetid and malignant Ulcers. This Method I have often upon reflecting concluded good, and upon Trial found to answer my Expectations. Many venereal Patients, on Account of the Ignorance of their Surgeons, and the preposterous Applications of Medicines, are long afflicted with such sordid Ulcers, which at last corrode and consume the whole internal Structure of the Nostrils, the Uvula, and the Bone of the Palate, to the great Detriment not only of their Voice, but also of their Health; but Gargarisms, tho' prepared of the most efficacious Ingredients, are in vain applied, because they cannot reach the Root of the Disorder, and the Part affected, which is above the Bone of the Palate.

Many Topics are, also, prescribed both by Physicians, and the Vulgar, for the Tooth-ach; but most of these generally do more Injury than good; and tho' after the Use of gentle Astringents and Anodynes, the best of which seems to me, to be, the Tincture of *Terra Japonica* mixed with an anodyne Tincture, there is some Alleviation of the Pain, yet it is very small, short lived, and at another Time not to be obtain'd. And as a Tooth-ach is frequently epidemical, and rises from a Rheum, or an acrid erysipelatous Defluxion infecting the carious Tooth, and generally joined with a catarrhus Fever, it is easy to perceive how idle and ineffectual an immediate Application to the Tooth must be. In this Case, if any Benefit can be expected from external Applications, the best we can use are paregoric Bags, prepared of discutient, carminative, and anodyne Ingredients: And tho' the Oils of Cloves and *O-riganum* are excellently appropriated

to a Caries of the Teeth, accompanied with Pain, yet when in a carious Tooth, a nervous Membrane is too much distended, or corroded by an aqueous Fluid lodged between the narrow Interstices of the Bone, we are rather to use the liquid apoplectic Balsam, or the Balsam of Life, received into the Nostrils; or a tepid Decoction of Milk with Elder flowers and Saffron, kept in the Mouth, will better alleviate such a Pain, than any other external Application whatever. And I can affirm from Experience, that Diaphoretics alone, such as Bezoardic Tinctures, Sulphur of Antimony, or succinated Spirit of Hartshorn, mixed with the sweet Spirit of Nitre, used in violent Tooth-achs, with a Sudorific Regimen, after the Use of such Medicines as render the Body soluble, produce very happy Effects. Thus it is sufficiently obvious, how propofterously Topics are generally used in Tooth-achs.

Various Errors are also committed, with respect to the Cure of cutaneous Disorders of the Face and Head. Thus nothing is more customary among the Vulgar, than the curing Achors, and scald Heads in Children, with various Lotions, Lixiviums, Decoctions, and Ointments prepared with Sulphur, Oil of Olives, and other unctuous Substances. But I have experimentally found this Method productive of the worst Consequences, since it is generally succeeded by Epilepsies, Inflammations, and Suppurations of the Eyes, an Epiphora, a Gutta Serena, violent Peripneumonies, Asthmas, and other Disorders of the like Nature. We are, therefore, in such Cases, to deal very cautiously with external Applications, for fear of obstructing the Perspiration in the Parts; nor are we ever to prescribe them, without at the same Time exhibiting internal Medicines,

for

for correcting the peccant Humours. We are never externally to apply moist, oleous, and astringent Substances; and if Topics are indicated as proper, antimonial Balsam of Sulphur dissolved in camphorated Spirit of Wine, and mixed with Oil of sweet Almonds, will produce excellent Effects, by mollifying, discussing, and resisting farther Putrefaction. In venereal Pustules, and a Gutta Rosacea, we are, also, to deal very cautiously with Repellents, and such Medicines as constrict the Pores of the Skin; since by their Means I have often observed the saline, acrid Serum, precipitated to the Coats of the Eyes, and an Ophthalmy produced.

How much Topics are abused in the Cure of an Erysipelas, is too obvious, for certainly, this Disorder requires a cautious Application of Externals, particularly when near the Brain and Origin of the Nerves; and it is not free from Danger, especially in scorbutic Patients, as Practitioners sufficiently know. Practical Authors furnish us with numberless Instances of the bad Effects of Topics in the Cure of an Erysipelas. Thus *Rolsinckius* in *Method. curand. Affect. Capit.* makes mention of a Quinsey produced by the unseasonable Use of Repellents in the Cure of an Erysipelas of the Head. *Aquapendente* in *Lib. de Tumouribus*, justly orders, that in an Erysipelas of the Face or Head, we are neither to use Topics before, nor after Purging; for by cold Substances, the Matter may be repell'd to the Brain, and produce a Phrenitis; or to the Fauces, where it induces a Quinsey. In such Cases, all Cataplasms, all unctuous, moist, and aqueous Substances are highly prejudicial. But we are rather to use dry Substances alone, such as Bags prepared of emollient and discutient

Herbs, that the Transpiration may remain free. Sometimes, however, camphorated Spirits of Wine, mixed with Essence of Castor, and Oil of Nutmegs, and with volatile Salt of Worms, Nitre, and a little Opium, used by Way of Ointments, produce very salutary Effects.

Those seem to be in a great Error, who for the Cure of a Gutta Rosacea, and Pustules, use sublimate Mercury; since this, when receiv'd into the Pores, greatly dispose to violent Head-achs, Hemicranias, and Looseness of the Teeth. But the Intention will be far better answer'd by Tincture of Benjamin, and with Magistery of Lead, Camphire, Sugar of Lead, Frogs Spawn Water, and Elder flower Water.

When the Flesh of the Gums is so corroded, that the Roots of the Teeth appear bare, the Disorder is generally thought to proceed from a Relaxation of the Fibres. Hence it is a common Custom to prevent this Misfortune by the external Use of Astringents, such as the Essences of Mastic, and Tormentil, Alum, and the Tincture of Japan Earth, which instead of being beneficial, are rather prejudicial; for the Disorder is an Atrophy, and proceeds from a Defect of the nutritive Juice, in Consequence of an Obstruction of the minute and numerous Arteries of the Gums. Now if this Obstruction is confirmed by Astringents, the Gums must be still more deprived of their fine nutritive Juices. In such Cases, happier Effects are produced by Decoctions of Wine with Sage, Origanum, Rosemary, Camphire, Nitre, and a small Quantity of the Spirit of Sal Ammoniac. By washing the Mouth and Gums frequently with such Decoctions warm, the Vessels are opened, the Blood and Juices invited to the Part, the Fi-

bres of the Gunis corroborated, and the Use and Vigour of those Parts restored.

We now come to consider the Abuse of Topics in Disorders of the Thorax. In those inflammatory Tumors, therefore, of the Lungs, commonly called Pleurifies or Peripneumonies, nothing is more customary than the external Use of oleous Ointments, in order to allay the Pain. But I have rarely seen happy Effects produced by this Practice, since when the Disorder might at first have been dissipated by internal Resolvents and Discutients, they hinder its Discussion, and dispose it to a Suppuration; just as in erysipelatous Disorders of the external Parts, these Ointments, by obstructing the Pores, and relaxing the Fibres, invite a farther Defluxion of Humours, and dispose the Part to Suppuration, and Exulceration. If, therefore, as it often happens, the Pleurisy is spurious, that is, if an acrid saline Serum stagnates between the Membranes of the intercostal Muscles, in which Case it is a Species of Rheumatism, the abovementioned Topics will be far more injurious than beneficial, by hindering the Transpiration and Excretion of the stagnant Matter, which, however, is absolutely necessary to the Recovery of the Patient. Some, in order to allay violent Pain, have a Custom of adding to those the Oil of Henbane, by which Means the Pain is indeed alleviated, but at the same Time a Drowsiness, a Languor of the Strength, and a difficult Expectoration succeed; which, especially in old Age, are not without Danger. Besides, in these Disorders it is customary with some, to apply Plasters, such as the Emplastrum Vigonis mixed with Mercury, Balsam of Sulphur, and Camphire. But by this Means I have found, that when the Pleurisy has been spurious, and

affected the intercostal Muscles and Membranes, but not the Lungs, the Pain has indeed been dissipated, but the Matter has been convey'd to other Parts; and I have known the Matter repell'd to the of Substance the Lungs, where it has produced Impostumations sufficiently chronical and dangerous.

In my Opinion, therefore, in all these inflammatory Disorders of the Thorax, we are either absolutely to abstain from all Topics; or if any are to be admitted, camphorated Spirit of Wine mitigated, and render'd Anodyne by an Addition of Castor, Saffron, and distill'd Oil of Nutmegs, used by Way of Ointment, seems preferable to all others. There are, however, some Disorders, in which pinguious Ointments, those possess'd of an anodyne Quality, and such as relax the Fibres, produce happy Effects, tho' they are rarely used. A Disorder of this Kind is the dry Chin-cough, in which not so much the Quantity, as the peccant Quality of a thin and acrid Matter, stimulates the pneumonic Nerves, and Thorax, to violent, convulsive, and concussive Motions; in which Cases it is necessary to allay these Motions, and relax the constricted Parts of the Thorax, not neglecting, at the same Time, to inspissate and correct the thin and acrid Humour. This Species of Cough is frequently very obstinate, and raging violently at certain Seasons, principally attacks Children and Infants. I have frequently seen good Effects produced by anointing the whole Breast with an Ointment, prepared of the *Unguentum Potabile*, Sperma Ceti, Badgers Fat, Ointment of Poplar, Oil of Anise, and Camphire.

We shall now subjoin something with regard to Topics, in a true Phthisis, or Exulceration of the Lungs: We have Instances of Phthi-

fical Patients, who bear some Ointments and Plaisters well ; but others not without Injury. The Nature, therefore, of every Phthisis, and its particular Cause, are to be investigated. Topics are not therefore useless, when the Lungs are full of hard Tubercles, which for the most Part gradually come to Suppuration : For this Purpose the Plaisters ought not to consist of too hot Substances, nor those of too tough and unctuous a Kind ; for the former increase the Pain and Inflammation, and the latter hinder a free Perspiration. The best of all is *Rulandus's Emplastrum Diasulphuris*, without the Colophony. But 'tis to be observ'd, that, in Disorders of the Lungs, Plaisters are not to be applied to the Sternum, thro' which they cannot penetrate, but rather to the Back and Sides, because there the Pores are more open, the Blood more copious, and the Vessels more numerous, in Consequence of which, the subtil and salutary Parts of the Plaisters are the better received and admitted.

We now come to consider some Disorders of the Stomach, in which Topics are beneficial, provided they are duly applied. No Pain is more cruel than that which is fixed in the right and left Orifices of the Stomach, which are highly sensible, and is generally call'd a Cardialgia. In this Disorder it is customary to take internally various Remedies for mitigating the Pain, and externally to anoint the Region of the Stomach with some spiritous Liniments, or an Ointment prepared of carminative and anodyne Ingredients. But this Method does not produce the desired Effect, for since the Pain is fixed in a very small Part, that is, in these nervous Orifices, it is sufficiently obvious, that a penetrating and efficacious Medicine is to be applied as near as possible to those Parts. Now if either a Plaister, Liniment, or

Ointment, is applied to the whole Region of the Stomach, a small Quantity of any of them can only penetrate to the Orifices of the Stomach. Besides, as it is certain from Anatomy, that the superior Orifice of the Stomach is nearer the Back and Vertebrae, since it is situated hard by the *Aspera Arteria*, it is sufficiently obvious, that the Medicines applied to the Pit of the Stomach, can by no Means penetrate to it. Such Remedies are, therefore, to be applied to the Back, about the eighth and ninth Vertebrae, before they can affect it. But if the right Orifice is affected, we are to apply our Remedies under the Stomach, towards the right Side. But in Cases of this Nature, we are by no Means to use too volatile Substances, such as Spirits, nor unctuous and emplastick Substances, which operate too slowly ; but rather a pretty thick Liniment, in the Form of a Plaister, and prepared of Treacle, Saffron, Oil of Nutmegs, Camphire, Peruvian Balsam, and Oil of Henbane, I have often found this Preparation afford Relief, and where it proves unsuccessful, nothing is to be expected from other Topics.

Practitioners well know that in Weaknesses of the Stomach, Vomiting, and Nauseas, nothing is more common than to apply Ointments, or oval stomachic Plaisters, under the Sternum. But upon dissecting Carcasses, we find that only a very small Portion of the Stomach, but the Liver, the Intestinum Colon, and the small Intestines, are situated there. The Stomach inclines rather to the left Side under the Ribs, where at least three Parts of it are situated towards the Spine. If, therefore, we only apply generous and penetrating Medicines to the spurious Ribs of the left Side, towards the Back, we shall find far more happy Effects produced on the Stomach by them.

The violent Pain arising from a Stone sticking in the Beginning or Middle of the Uterus, also, demands the Use of Topics; but they must be applied with great Caution, for 'tis sufficiently known, that a pretty large Stone, whilst lodged in the tubular Substance of the Kidneys, creates no Uneasiness, but excites an intollerable Pain, when it falls into the narrow and sensible Ureters. Hence we perceive, that Topics for this Purpose, ought not to be applied to the Loins, where the Kidneys are not situated, but according to the Direction of the Ureters, that is, from the Loins to the Groin. But even in this, a violent Error is generally committed, whilst with the Ointments, most Persons mix hot forcing Substances, such as the Oil of Amber, Spirit of Turpentine, and the Oil of Juniper, which Practice is productive of very bad Effects; many indeed intend by these hot Substances, to force the Passage of the Stone thro' the Ureters; but it is by this Means rather fixed and more violent Symptoms, such as a Suppression of Urine, Vomitings and Convulsions, are excited; for, that the Stone remains fixed in the Ureter, is not so much owing to its Bulk as to the painful Spasm of the Ureter; and as by the Asperity of the Stone, the nervous Fibres are generally irritated, there happens an Influx of the Spirits, and Pain accompanied with Spasms and Constrictions, and the more intense the Pain is, the more narrow and contracted the Passages are; For if spirituous hot Substances are in such a Case applied, they excite an Influx of the Blood and Spirits, fix the Stone more firmly in the Part, increase the Pain, and induce many terrible Symptoms. 'Tis not indeed to be denied, that where there is neither Pain nor Spasms, or where there is a certain Laxity, or want of Tone, in the nervous and membraneous

Fibres of the Kidneys, such Things externally applied, because they strengthen the Tone of the Parts, promote a Discharge of Urine; but they are by no Means to be used, when there is any Pain or Spasm, in which Case we are rather to use emollient, paretic, and anodyne Oils, such as the Ointments of Poplar, Henbane, Poppy-seeds, and white Lillies, Badgers-fat, and Camphire, which gives them a penetrating Quality. With these the Region of the Ureters is to be frequently rubbed, and anointed, with a warm Hand; for these Substances by checking the Impetus of the Spirits, and relaxing the contracted Fibres of the Ureters, occasion a far more easy and expeditious Passage for the Stone. For this Reason, sitting in a Bath is highly beneficial, and sometimes affords instantaneous Relief.

In excessive Discharges of the Menfes, and involuntary Effusions of the seminal Fluid in Men, 'tis customary to apply to the Lumbar Region, where the large Ramifications of Blood Vessels are situated, and freely exposed, such Medicines, as in some Measure check the Impetus of the Blood to the genital Parts; and it is of great Importance what Medicines are used on these Occasions, and at what time they are applied; for I knew a Woman, who, in an immoderate Flux of the Menfes, had a Plaister applied to her Loins, consisting of the Frogs spawn Plaister mixed with Sugar of Lead, and Oil of Henbane; but from that Time her Menfes never returned, to the great Detriment of her Health. We are, also, carefully to abstain from all Things actually cold, and much more Narcotics; because all these by checking the Blood, if it tends too much to these Parts, produce a palliative Cure, but bring on much worse Misfortunes, such as Inflammations of the Kidneys, convulsive Colics, and

and spasmodic Disorders of the Abdomen. Hence it is the safest Method, especially in Evacuations of Blood, totally to abstain from these Topics; but rather to carry on the Cure by internal Medicines.

We now come to consider some Disorders which proceed from a Relaxation, Resolution, or Want of Tone and Strength in the Ligaments; such as the falling down of the Fundament in Infants, and of the Uterus in Women. Physicians and Surgeons, in Consequence of the Relaxation, generally treat these Disorders with Astringents; and for that Purpose foment the Parts affected with astringent Decoctions. But as this *Prolapsus* or falling down, does not so much proceed from a Relaxation of the Uterus, or Intestinum Rectum, as from a Relaxation of their Ligaments, on Account of the Congestion and Accumulation of the Juices there, so every one must perceive, that this Method is idle and ineffectual, because these external Astringents, cannot penetrate to the Ligaments themselves. Hence in a falling down either in the Uterus itself, or of the Vagina, such Things immediately applied to the Uterus are of no Efficacy. But rather the inguinal Region is to be fomented with balsamic and penetrating Liniments and Plaisters, which being not so much possessed of an earthy Stypticity, as of a spirituous corroborating Quality, restore Vigour, Motion, and Tone to the moist and relaxed Parts. But 'tis here to be observed, that as in all other Cases, so also in these, Topics alone are not sufficient; but that internal Medicines are more universally necessary, in all internal, and even external Disorders of the Body. I do not, however, reject Fumigations and Fomentations of Wine prepared with aromatic Herbs, such as are possessed of a volatile

oleous Salt, and a certain earthy Principle, by which these Parts may be immediately affected, since the Force of Fumigations penetrates intimately, as do also the Effluvia arising from Baths.

With Respect to blind Hemorrhoids, it is sufficiently known, that great Uneasiness is produced by the Tumours of the hæmorrhoidal Region, arising from the too great Afflux and Stagnation of the Blood, or of a viscid Serum. For the Cure of this Disorder, Physicians and Surgeons have invented numberless Medicines, especially Topics: But how much they all fall short of their Intention, is too well known to the miserable Patients; for the Astringents recommended, rather obstruct the Humours which produce the Tumor; on the contrary, emollient and anodyne Substances relax the Parts, and invite a farther Afflux of the Humours, whilst acrid Medicines corrode the Parts, and generally dispose them to malignant Ulcers, and even Fistulas. The Skill therefore of the Physician consists in distinguishing the Use of these according to Circumstances, and knowing what he ought to do; for if the Pain is excessive, anodyne and emollient Substances are beneficial. Hence Linseed Oil alone, applied in a sufficient Quantity, excellently mitigates the Pain. If the Tumor is troublesome by its Bulk, then not so much earthy Styptics, as Corroboratives, are to be used, such as Fomentations of Wine prepared with Mastich, Amber, Rose-flowers, Balauftines, Frankincense and Yarrow. Nor are Fumigations in such Cases to be excluded, especially such as are prepared of Things impregnated with a volatile oleous Salt, the Nature and Virtues of which are to insinuate themselves deeply, to strengthen the Pores, and dissipate the excessive Humidity.

From what has been said, I think it is sufficiently obvious, how preposterous a Practice it would be, when the Pain is greatest to use astringent, cold, or acrid, Substances; or if, when there is a violent Tumour without Pain, we should apply emollient, anodyne, and relaxing Substances.

I now come to discuss this important Question, Whether in excessive Effusions of Blood or Lymph from the Uterus, Injections may be properly used, especially since we find from Experience, that they are with great Advantage prescribed in excessive Fluxes of the Semen? But as the Vulgar are of Opinion, that Fluxes ought not to be stopt by Astringents, so nothing is more dangerous, than to attempt the checking of excessive Discharges of this Kind by external Injections, possessed of an astringent Quality. I remember a Woman, who when labouring under an excessive Discharge of the Menfes, by an Injection of the Decoction of Yarrow impregnated with Alum, contracted an Ulcer, accompanied with a Consumption and hectic Fever, which proved fatal to her. We are, therefore, to deal very cautiously with Injections, since they frequently do more Injury than Service.

We now come to consider the Disorders of the Joints; and certainly if Topics are in any Cases abused, they are most so in arthritic and gouty Pains; for because the Disorder lies in the external Parts, many are of Opinion, that the Remedy is immediately to be applied to the Part affected, that it may the sooner reach the Cause of the Disease. But in this they are greatly mistaken; for Topics are not, in these Disorders, so requisite, but the Pain may be mitigated without them. We learn from Experience that with-

out any Topics, by internal Medicines alone, opposite to the morbid Cause, the Violence of these Pains may in Process of Time, be not only mitigated, but also totally removed. But we are above all Things to take Care, that Repellents, especially in the Beginning of the Disorder, be not used; for these disturb the Motion of Nature, which is from the Center to the Circumference, repel the peccant Matter inwards, and excite violent Symptoms. In the Beginning of a Gout, I knew the Application of a Plaster composed of the White of an Egg and Alum, in a plethoric Man, produce in one Night's time a lethargic Disorder, which destroyed the Force of his Genius, and Strength of his Memory all his Life after. *Hagendorn in Cent. 1. Hist. 28.* gives us a memorable Instance of a Merchant who labouring under a scorbutic Tumor, had an Eplthem prepared of distilled Waters, Cerufs, and Camphire, applied to it, by which his Pain was alleviated; but he lost his Speech, and the Use of his left Arm. With no better Success is the present Practice, of anointing the external Parts with camphorated Spirit of Wine, attended. It is hardly possible to enumerate the Misfortunes which may be produced by this Remedy, used without any respect to the Patient, and his Circumstances. Thus by the Application of it to gouty Feet, I have frequently observed Cardialgias, convulsive and epileptic Motions of the Limbs, Palsies, and other terrible Symptoms excited. 'Tis, also, certain from Experience, that all Medicines are not beneficial to all Patients, since some Topics remove the Pain in some, and increase it in others; whilst some are relieved by spirituous Liniments, others by anodyne Plaisters, and others by Cataplasms

plasma prepared of Milk, and the Crumbs of Bread ; whilst none of all these Remedies agree with others.

The Cause of these particular Effects, is not sufficiently adverted to, and investigated, since it is sufficiently known to Surgeons, that all Patients cannot equally bear the same thing in external Wounds. But the Cause of this is not so much the peculiar Disposition of the peccant Humours, as the tense and tonic Constitution of the Fibres, Pores, and Vessels of the Skin; for all the Parts, especially the Emunctories and Strainers, have their peculiar Strength, Tone, Tension and Dilatation, which Species of Motion, so highly necessary to the Secretions and Excretions, principally depend upon the Influx of the animal Spirits, and the Tension of the nervous Membranes. Of what Kind, therefore, this Influx of the animal Spirits, and Tension of the nervous Membranes is, in every Patient, in all Disorders, and their various Stages, ought to be diligently consider'd by Physicians, in the Application of their Topics; for every one sees, that when the Pores are contracted by Pain and Spasms, hot and spirituous Medicines are by no Means proper, but rather such Medicines as gently relax the contracted Parts. On the contrary, if there is too great a Relaxation after the Pain, which appears from the Tumor, and the Decrease of the Pain, all moist, unctuous, and anodyne Ointments, are very injurious; in such Cases we are, therefore, rather to use spirituous, nervous Liniments. And tho' Topics sometimes are beneficial in allaying Pain, and mitigating the Fever, yet they do not always produce the same happy Effects in the same Patients. In a Word, the stronger Nature is in expelling, and the greater the Strength of the Body, and of the internal Motion are, the less Danger Topics,

if prudently applied, induce. But if the Vigour of the Motions has ceased, if the Patient is old, or afflicted with a Cachexy, Topics are absolutely to be rejected; for the principal Intention of the Physician is not, by Topics, to hinder the Evaporation of the peccant Matter, but to promote it; and since great Judgment is necessary to this, it is safest to abstain from all Topics, to commit the whole Cure to internal Medicines, and keep the Parts affected in a gentle Heat.

I have also observed, that the Generation of Tophs, which principally happen in a fixed Gout, is for the most Part owing to an incautious Application of Topics, especially those of the stupifying and refrigerating Kind. Thus *Wedelius* in his *Traët. de Medicament. Facultat.* informs us, "That many arthritic Patients have suffer'd much, have had their wandering converted into fixed Gouts, and many Tophs formed, by using unctuous and pinguous Plasters." To this Purpose, *Galen in Method. Medend. Lib. 4. Cap. 3.* tells us, that in the Gout, Tophs are produced by a thick and glutinous Humour, which is not gradually digested, but suddenly dried by violent Remedies. And *Fernelius in Consil.* 12. observes, that gouty Pains are produced by the same Means. But I am of Opinion that all Topics are not to be discarded in external Pains of the Joints; for when the Pain is inveterate, and accompanied with a certain Torpor, and Insensibility, which frequently happens in old Age, then after checking the internal Ebullition of the Blood, we are, by nervous and balsamic Liniments, to corroborate the Nerves, and invite the Influx of the nervous Fluid into the weakened Parts. We must not forget the common Practice of applying live Earth-worms to the Parts affected,

ed, in a wandering scorbutic Gout. Great Encomiums are bestowed on this Remedy by practical Physicians, especially by *Wierus*. And it is certain, than on Account of the volatile, absterfive, and nitro-fulphureous Salts these Animals contain, they are of an excellent discutient and sedative Virtue, which manifests itself not only internally, but also externally, in various Kinds of Pains, and even in the venereal Disease itself. Yet great Caution is requisite in the Application of these Animals; for tho' in the most cruel Pain, when the Fluids are in Motion, and the Strength entire, and the Patient young, these Substances produce happy Effects, yet they produce quite contrary Symptoms in a fixed inveterate Gout.

We shall subjoin something more, with respect to an Erysipelas, for the Cure of which, most Surgeons and Physicians have immediate Recourse to Topics, tho' the Errors arising from this Practice have been often exposed. But I would have it observed as a general Maxim, that an Erysipelas, arising from an external, ought to be distinguish'd from that arising from an internal Cause. In the former produced by Contusions, and other Wounds, Topics are not generally prejudicial. But when the Disorder proceeds from an Orgasm of the Humours, and a febrile Impetus, an heterogeneous Matter, generally of an acrid and corrosive Nature, is protruded to the Surface of the Body; in which Case we must be very cautious, since the Matter is easily repelled; and since by those Topics, which, in other Cases prove beneficial, we may do an irreparable Injury to the Patient, by repelling into the internal Parts the peccant Matter, which then acquires the Nature of a Poison. Nothing is more common than by Astringents, such as the White of an Egg mixed with A-

lum, to render a slight Erysipelas fixed and profound, and to excite malignant Ulcers, Instances of which daily occur in Practice. Hence those Physicians act prudently, who treat all the Species of Erysipelas with Internals, apply only externally Bags full of paregoric Herbs, which by their mild Influence, keep the Pores open, relax such as are constricted, and cherish the Parts.

We must, also, observe, that Surgeons commit a terrible Error in applying hot Cataplasms, prepared of Bean-meal, Liquorice-root, emollient and discutient Herbs, and certain Waters, to an Erysipelas; for since by the Heat the Moisture is dried up, and the Matter is more firmly impacted in the Skin and Pores, so that it can hardly be removed by a Knife, the Business of Transpiration is greatly injured, and the Erysipelas, which by proper Measures might have been discussed, is by these converted into an Abscess or an Ulcer. We are, therefore, to endeavour to preserve a free Respiration of the Parts affected, which can never be obtain'd under a cold State of the Air, an intense Heat, or a great Load of Cloaths, but under a moderate Heat, which excellently encourages Perspiration.

In like Manner, Topics ought to be cautiously applied to Buboes; because by Repellents they are render'd malignant. Much less are we to apply Topics of an astringent and refrigerating Kind to malignant and critical Buboes; because, such a Practice is highly dangerous. Critical Buboes, when the Humours are convey'd to the Glands, are known by the Patients retaining his Strength, by their happening on the critical Days, and by the previous Signs of Concoction in the Urine. At this Time all Repellents are highly prejudicial; for as *Hippocrates* justly observes, in a perfect Crisis, no Change of

of the Patient's State is to be attempted; but the whole Business is to be left to Nature. Sometimes a Bubo arises from a Redundance of Blood, in which Case, according to *Avicenna*, *Oribasius* and others, we are by no Means to use Repellents. But when a Bubo tends to Suppuration, nothing is more beneficial than the Application of the Diachylon Plaster with the Gums, mixed with Opoponax.

'Tis justly to be doubted, whether Topics are proper in the Small Pox. We can affirm in general, that as this Disorder is a critical Evacuation, great Caution is requisite. However if before the Eruption the Patient is afflicted with a Delirium, we may with Advantage apply to the Forehead, Spirit of Roses mixed with Camphire. But during the Eruption and Suppuration, I am of Opinion, that we ought to abstain from all Liniments. In the Decline, and at the Time of the Exiccation of the Disease, when the Force of the Disorder is subdued, I cannot disapprove of Oil of Sweet Almonds, mixed with Camphire and Sperma Ceti, in order to prevent the Defecation of the Skin, and correct the Acrimony which generally lies pretty deep. For this Reason we are cautiously to proceed with Topics of this Kind, such as Spirit of Wine impregnated with Myrrh, and Sugar of Lead mixed with Rose Water.

The Itch, which is a pustulous Exulceration of the Skin, more or less moist, is generally thought incurable without the Use of Topics. Hence neglecting all internal Remedies, they forthwith have Recourse to various sulphureous and mercurial Liniments, which they apply either to the whole Surface of the Body, or only to the Joints, tho' frequently with very considerable Danger both to Life and Health; for it is never safe by Topics to cure external Disorders proceeding from an internal Cause; but as Nature expels the he-

terogenous and morbid Matter, the Physician ought to do the same, and never counteract the Intentions of Nature, which is generally done by Repellents externally applied. Hence I am of Opinion, that the Cure of these cutaneous Disorders, ought not only to be begun, but also finished by such internal Medicines, as correct and dispose the peccant Matter to Excretion, and at the same Time eliminate it. To this Class of Medicines belong not only Diaphoretics, emollient and laxative Infusions, but also if the Itch is inveterate and malignant, Preparations of Mercury and Antimony. Then, for the better Consolidation of the Skin, and the Restitution of its Beauty, we may use Baths, and drying, sulphureous, and saturnine Ointments. But we are always to abstain from external mercurial Liniments, which can never be used without Danger, as is obvious from numberless practical Observations.

As for mercurial Ointments and Fumigations used to excite a Salivation in the venereal Disease, it is sufficiently known what violent Symptoms are brought on by these Means, and how precarious this Method of curing so obstinate a Disorder is. I am certain from Experience, that the venereal Disease, may be happily removed by proper Preparations of Mercury and Antimony, and Decoctions of the Woods, exhibited internally in a due Manner, without any external mercurial Applications, and often without exciting a Salivation, or any Train of uneasy Symptoms.

With respect to Topics applied to paralytic Parts, tho' these excellently assist the Operation of internal Remedies, yet they ought to be properly chosen, and cautiously applied. Those are, in my Opinion, greatly mistaken, who think that Fats, Lards, and unctuous Liniments ought to be applied, either immediately to the

Parts affected, or to the Spine of the Back; for these Substances obstruct the Pores, and still more relax the Fibres, whose Tone is already destroyed; by which Means they dispose the Parts to a Tumor. On the contrary, spirituous, hot, and ethereal Oils alone, do not produce the desired Effect, since most of them, in Consequence of the Subtility of their Parts, fly off in the Air, and leave the nervous and muscular Fibres too rigid. This Intention is better answered by Ointments prepared of the Fats of Animals, and the distilled Oils, such as those of Rue, Marjoram, Lavender, Juniper, Cloves and Rosemary. For the Tone of the nervous Parts ought to be render'd natural; so that there be neither too great a Relaxation, nor Constriction; too great an Humidity nor Dryness. Besides, 'tis to be observed, that in a Palsy arising from a Disorder of the Spinal Marrow, and Origin of the Nerves, these Medicines are not to be applied to the Parts destitute of Sensation, and Motion; but to the Source of the Disorder, which is lodged in the Spinal Marrow. But it is quite otherwise in that Species of Palsy in which the Motion, but not the Sensation, of the Part is destroyed, which happens frequently to Miners, in which Case 'tis of no Use to anoint the Spinal Marrow, but the Part affected is to be frequently fomented with the abovementioned Medicines.

With respect to oedematous Tumors, which frequently seize the Feet, great Caution is, also, requisite as to the Application of Topics, since they who treat them with Baths, commit a terrible Error. Thus I have seen cachectic Persons, by immersing their Feet in warm Water, contract, in one Night's Time, a considerable Tumor of them, which could not after-

wards be easily removed. The Reason of this is obvious; for these Baths by their Moisture, which by Means of the Heat insinuates itself into the Pores, render the weaken'd Fibres still more lax; so that the Humours flow down, and are not quickly receiv'd again into the Veins and lymphatic Vessels. The same Effects are, also, produced by those who attempt to dissipate such Tumors by Ointments and Plaisters, for a Reason easily deduced from what has been said. Some have a Custom of tying discutient Herbs about the Feet, such as the greater Celandine, Fumitory, Wormwood, and Rue; but if these are moist and cold, they often increase the Tumor, instead of removing it. 'Tis, therefore, better to abstain from all these, and apply proper Bandages to the Feet, especially towards the Evening, when such Tumors are always observ'd to increase, that by this Means the Fibres may be corroborated and strengthened. Fomentations of strong Vinegar, mixed with Essence of Amber, and pour'd upon ignited Bricks, have often been found productive of happy Effects.

'Tis customary in various Disorders, to apply Epithems and Plaisters to the Pulse in the Wrists. This Practice, tho' not to be discouraged in itself, is nevertheless often abused, especially by Nurses, and the common People, who, whether a Disorder is of the cold or hot Kind, commonly have recourse to the celebrated *Aqua Carbunculi*, which they think of incredible Efficacy to restore Strength. But every one must perceive, that this is by no Means proper in a burning or acute Fever, or in the Heat of an intermittent Fever, in which Cases, rather penetrating Acids, such as Lemon-juice, and Vinegar of Roses are proper. Epithems and Plaisters are, also, applied to the Wrists, in order to remove the febrile

febrile Paroxysms in Intermittents; for which Purpose they mix Alum, Vinegar, Rue, the greater Houfeleek, and Spiders-webbs. They, also make a Plaister of Turpentine, Alum, and Powder of Spiders, which are often of great Service in mitigating the Paroxysms, and even in totally removing them, if the greater Part of the febrile Matter is evacuated.

The Manner in which these Medicines operate, is somewhat difficult to be conceiv'd; and such an Experi-

ment, in my Opinion, illustrates the Generation of Fevers of this Kind; for the Heart and Arteries, which have their proper Nerves and systaltic and diastaltic Motions, are the Instruments, by which the intense Motion of the Fluids is performed. Hence such Things, as in some Measure check and hinder the excessive Motion of the Spirits to these Parts, when immediately applied to the Arteries, must necessarily for some Time, stop the febrile and intensely hot Motion of the Blood.

The End of Second B O O K.



THE NEW

English Dispensatory.

BOOK III.

Of the Simples us'd in MEDICINE.

CHAP. I.

Of VEGETABLES.

ABIES, the *Fir-Tree*. There are three Kinds of this commonly us'd in Medicine. The First of these is the *abies offic*, *abies conis sursum spectantibus*, C. B. Pin. *Abies taxi Folio*, *fructu sursum spectant*. Boerb. Ind. Alt. Plant. commonly call'd the *Silver-Fir*. The Tops of this Species boil'd in Ale or Water, and mix'd with Wine, are said to afford a Drink, in rheumatic, arthritic, and scorbutic Cases, not inferior to Decoctions of the exotic Woods; especially if three or four Ounces of it are drank for a Month's Time, before Meals, with proper Exercise; for by exciting a Sweat, it frees the Blood from heterogeneous Particles; but if there is a Plethora, this must be diminish'd, before its Exhibition;

because by its balsamic Quality, it excites some Commotion in the Blood. 'Tis said that a considerable Quantity of the Leaves and Tops of this Species of Fir, enters the Composition of *Brunswick Mum*, and that a Decoction of the Wood, or Sawdust, is much us'd by the Inhabitants of some northern Countries for the *Flyor Albus*, and all Disorders of the urinary Passages. The *Strasburg Turpentine* is the Product of this Fir, and is call'd its liquid Refin, in Contradistinction to its dry Refin, which resembles *Frankincense*.

The second Species of Fir used in Medicine is the *Abies tenuiori folio*, *fructu deorsum inflexo*, *Abies mas Theophrasti*, *Picea Latinorum*, and *Abies tenuiore Folio*, *Fructu deorsum sp. fante*, Boerhaave Ind. Alt. Plant or the common Fir which produces white Resin, Tar, common Pitch, and

and *Burgundy Pitch*. This agrees, pretty much in Virtue with the former; and 'tis reported that the *Laplanders* prevent the Scurvy, by procuring a copious Discharge of Saliva, by chewing its Resin; as also that they remove the Uneasiness produced by intemperate drinking, by twisting the tender Twigs of this Tree round their Heads.

The third Species is the *Abies Canadensis*, *Abies Minor pectinatis Foliis*, *Virginiana*, *Conis parvis Subrotundis* Pluck. Phytog. or *Canada Fir Tree*, which yeilds a valuable Resin call'd the Balsam of *Canada*, which is used in cleansing and deterging internal Abscesses, previously mixing it in the Quantity of two or three Drams, with Broth prepared with Flesh, Oil of Sweet Almonds, or the Yolk of an Egg.

Abrotanum, Southernwood, of this Authors have mentioned several Kinds but the most considerable are the *Abrotanum mas Officinatum*, *Abrotanum mas Angustifolium majus*, C. B. and Boerb. Ind. Att. Plant. Male Southernwood. This Plant is so very common, and so well known, that it does not require a Description. It is justly extolled on Account of its heating, stimulating, inciding, subastringent, and discutient Qualities; for which Reason it is esteemed among the uterine, emmenagogue, diuretic, sudorific, anthelmintic, and anti-septic Medicines. *Galen* says, it diminishes the Fit of an intermittent, if the Patient is rubbed with it before its Invasion. It is used in aqueous and vinous Infusions, but it may also be exhibited in Decoctions against Worms, since in such Cases highly bitter Medicines are required. Externally it is used for uterine Baths, and Fumigations. The distilled Water of the Plant is, also, possessed of the above-mentioned Virtues, and the Oil procured from it by boiling is used externally

for Pains of the Abdomen and Intestines, as also against Worms. Hence we may understand, in what Sense this Plant is said to be good against the Bites of Serpents and other Poisons. As also why it is said to prove a Stimulus to Venery. The dried Leaves are prescribed in the *Fotus Communis* of the last College Dispensatory.

The other *Abrotanum* referred to by the College is, the *Abrotanum Fæmina foliis teretibus*. C. B. *Santolina Foliis teretibus Tourn.* *Abrotanum Fæmina Vulgaris*. Lavender Cotton. Park. The Leaves and Flowers boiled in Milk, and taken fasting are esteemed good against Worms. It is, also, commended against Poison, and the Wounds of venomous Animals; against Obstructions of the Liver, and Jaundice; and has the Reputation of promoting the menstrual Discharge, taken by Way of Infusion in Wine. It is, farther, esteemed diaphoretic, and good against the Colic.

There is another *Abrotanum* mentioned as used in Medicine. This is the *Abrotanum Campestre*, Boerb. Ind. A. *Artemisia tenuifolia* Offic. Fine leaved Mugwort. This is sometimes substituted for the *Abrotanum mas*, and is said to mitigate Pains in the Stomach, and nervous Parts. There are many other Species, but these are the principal in Use.

Abrus Offic. Veslin *Phaseolus ruber* *Abrus Vocatus* Alp. Egypt, *Phaseolus indicus ruber Bentio* Raii. Hist. This is imported from both the *Indies*, and the Seeds, of which there are two Kinds in the Shops both red are recommended for curing Inflammations of the Eyes, drying up Rheums, strengthening the optic Nerves, refreshing the Spirits, dissolving cloudy Vapours of the Brain, and clearing the Sight.

Abfen-

Absinthium. Wormwood, of this there are various Kinds, but the most considerable are the *Absinthium Vulgare* Offic. Park. *Absinthium vulgare Majus*. J. B. Wormwood is accounted a Plant of great Efficacy in Medicine. Thus in *Ephemer. Nat. Curios. Decad.* 1. An. 2. Obs. 2. Bartholine informs us, that with great Success he used Sea-water, in which Wormwood had been boiled, for the Cure of a Gangrene. This Plant is possessed of oleous Principles, mixed with a large Quantity of Earth, and a small Portion of Phlegm; for which Reason, it is beneficial in all cold Disorders, such as proceed from Phlegm, Viscidity, or an Acid. It is, also, serviceable in Intentions where drying is requisite, or where the Bile is defective. It is accounted excellent for promoting an Appetite, and procuring Digestion. It is of singular Service, both as a Preservative and Curative, in Obstructions and Infarctions of the Viscera, as also against Putrefaction, for which Reason it is proper in intermittent Fevers, against Worms of the Intestines, Cachexies, œdematous Tumors, and Obstructions of the Liver; but it is highly prejudicial in Cases where Inflammations are either present or suspected. Its recent express'd Juice drank in large Quantities, by irritating the Vessels, dissipating the Water, and attenuating the viscid Humours, is of Service in Dropsies and Leucophlegmatias, arising from Langour and Cold, that is, from a Redundance of Water or Phlegm; but this Juice is no less injurious in that Species of Dropsy, which arises from a Dryness of the Liver or Spleen; since it augments the Force of the Circulation, Dryness, and Acrimony. This Plant is the principal Ingredient in the celebrated Wine called *Vinum Absinthites*, so much extolled in the Time of the Plague. But that Worm-

wood used to Excess is hurtful to the Eyes, is sufficiently obvious from those who daily use Wines and Oils prepared with it. This Plant bruised with Vinegar, Wine and Salt, and applied externally, proves highly discutient; and it is often applied alone to the Soles of the Feet, in order to prevent the Formation of Tumors in them. Ray informs us, that green Wormwood worn in the Shoes, corrects a cold Intemperature of the Stomach. Hence we see the Reason, why Wormwood is called stomachic, anti-febrile, anti-hysterical, anthelmintic, narcotic, and good against the Colic. The Smoke of the kindled Flowers or Tops of Wormwood, generally allays the Tooth-ach, as we are informed by *Grube* in *Tr. de Simpl.* The Seeds of this Plant are said to be good against a Dysentery; and the Taste of its Root is first perceived on the Point of the Tongue, then at its Root, then in the Fauces and Gullet, so that at last it seems to warm the Stomach itself, tho' none of the Juice is swallowed. Nor is this Root ungrateful or prejudicial to the Health, as the Leaves are. Hence *Grevinus* infers, that it is justly to be reckoned among the most valuable Stomachics, which Mr. Ray found it to be from Experience. Wormwood affords a large Quantity of fixed Salt, of the same Virtues with other lixiviate Salts of the same Kind. Of this a lixivial Salt is directed to be made by the College; and an essential Oil is prepared from the Leaves.

The other Species of Wormwood taken Notice of in the College Catalogue is, the *Absinthium marinum Album* Ger. *Absinthium Seriphium* Belgicum C. B. This has been long used in the London Shops instead of the true Roman Wormwood, tho' *Dioscorides* and *Galen* affirms, that it is prejudicial to the Stomach. I dont know why the College have, in their Catalogue

so far complied with Custom, as to substitute this in the Room of *Roman Wormwood*, when it is universally agreed that the latter is much the better Medicine. The former, however, is more palatable. The College directs a Conserve of this; and it is an Ingredient in the *Aqua Alexiteria Simplex* in the *Aqua Alexiteria composita*, both with and without Vinegar; in the *Fotus Communis*, and *Oleum Viride*. This Species is generally two or three Feet high, with many winged Leaves, lesser and finer than the common Wormwood. Its Flowers are small and naked as those of the other Kinds, and appear at the same Time. The Scent of the Plant greatly resembles that of Southernwood, and its Taste is not very bitter, but somewhat saltish. It grows in great Plenty in most of our Salt Marshes, and is generally sold in the Shops for the *Roman true Wormwood*.

There is also another Species of Wormwood distinguished by the Names *Absinthium Romanum* Offic. and *Absinthium Ponticum tenuifolium nicanum* C. B. Boerh. Ind. Alt. *Roman Wormwood*. This Species is much smaller than the common Wormwood, and has finer Leaves tho' of a lesser Size. Its Flowers grow in large Quantities on the Tops of the Branches, and appear in *July*. This Plant is with us cultivated in Gardens, and has neither so strong a Smell, nor so bitter a Taste as the common Wormwood. *Matthioli* informs us, that the most violent Dropsies, are cured by a Conserve prepared of its Leaves. In the *Edinburgh Dispensatory*, the Conserve of Wormwood is directed to be made with this Species.

There is also a Species of Wormwood called *Absinthium alpinum candidum humile* C. B. Tourn. Inst. *Mountain Wormwood*. This grows

in the Mountains of *Savoy*, and agrees in Virtues with the preceeding.

Abutilon. Offic. Boerh. J. A. *Althæa lutea*. Ger. Yellow Mallow. This Plant is cultivated in Gardens, and flowers in *July*. It is esteemed aperient, and vulnerary. The Leaves applied externally are said to cleanse Ulcers; and the Seeds to provoke Urine, and expel the Gravel.

Acacia. The Species of this mentioned by the Compilers of the last *London Dispensatory* is the inspissated Juice of the immature Fruit of the *Acacia Foliis Scorpioidis Leguminosa* C. B. which is also said to produce Gum Arabic. It is called *Acacia* Offic. Alpini, and *Acacia vera*, Raii Hist. Tourn. Inst. and Boerh. Ind. Alt. *The Egyptian Thora*. It is used for strengthening the Eyes, and preventing Inflammations therein, for curing Ulcers of the Mouth, and Fissures of the Lips, for fastening the Teeth, and strengthening weak Joints, as also for stopping Hæmorrhages and Fluxes. It is brought into Europe in Bladders containing globular Masses weighing between four and eight Ounces. The best, which is that expressed from the green Pods and inspissated, is externally of a blackish, but internally of a shining brown Colour, hard, brittle, and of an austere Taste. It is exhibited when the Humours are to be inspissated, and the solid Parts corroborated. It is given internally in the Form of Pills, Boliuses, or Solutions in some proper Liquor. Externally it is used, dissolved in Fomentations, and may prove beneficial in Disorders of the Eyes, where there is only such a slight Inflammation, as does not contraindicate the Use of Astringents, and Repellents. Tho' *Alpinus* thinks the external Application of it beneficial in the Gout, yet his Opinion will never be admitted by those who know

know, the prejudicial Nature of Repellents in such Cases; tho' it may be used internally for corroborating a lax and flaccid Constitution, and by that Means correcting the remote Causes of a Gout. The Dose, according to *Boerhaave*, is from four Grains to a Dram.

There is also another *Acacia*, called *Acacia Germanica* or *German Acacia*, which is no more than the expressed Juice of unripe wild Sloes, inspissated in a Bath-heat. It is black like the common Juice of Liquorice, is esteemed an Astringent, and used as such. The Dose, according to *Boerhaave*, is from six Grains to a Dram and a half.

There are some other Plants which are called by this Name as the *Acacia Indica Farnesiana*. Raii. Hist.

The Gum Arabic is said to flow from this Tree, as well as from the true *Acacia*.

The *Acacia siliquis Compressis*. Ind. Med. Gumm. *Seneca*. Offic.

The Gum called *Senegal* resembles Gum Arabic, but is imported to us in Lumps, which are rough externally, but clear and transparent within. It is sometimes whitish, and sometimes of a red Colour, of an insipid aqueous Taste, viscid and without any Smell. It is brought from *Guinea*, and as some think receives its Name from the River *Senega*. The *London* Apothecaries use the whitest and purest Parts of this Gum instead of Gum-arabic.

Acanthus, or *Branca Ursina*, Offic. *Acanthus Sativus*, or *Mollis Virgilii* C. B. This Plant grows spontaneously in *Italy*, *Spain*, and the Southern Parts of *France*, but is with us cultivated in Gardens, and Flowers in *July* and *August*. It is rarely used except in Clysters, and Baths intended to remove Obstructions, and alleviate Pains arising from the Stone and Gravel. It is said to be diuretic and to stop Diar-

rhæas. *Boerhaave* says, that it is possessed of an emollient and aperient Virtue, and that it is of a very soft Nature, somewhat saponaceous, like the Mallow, and entirely insipid. Its glutinous and demulcent Juice is an Ingredient in emollient Clysters, and Cataplasms. It is excellent for Compositions. The Root is accounted good for Persons who spit Blood after a Bruise.

Acetosa, Sorrel. This is the *Acetosa Vulgaris*, *Oxalis* Offic. *Acetosa Pratenfis* C. B. Common Sorrel is a Plant, which has many Virtues ascribed to it in Medicine; for it is of an aperient, moderately refrigerating, and corroborating Nature. Its Leaves and Roots boiled in recent Whey, prove an excellent Remedy in chronical Diseases, where there is a Tendency to Putrefaction. A Decoction of Sorrel with Whey, drank in the Morning in the Month of *April*, excellently purges the Body from the Fæces collected during the Winter. But the principal Virtue of this Plant consists in its anti-scorbutic Quality; since if it is used recent, it carries off the Putrefaction of the Gums, and fixes the loose Teeth. Thus in *Hist. Acad. Royale des Sciences*, we are told, that a great many scorbutic Patients were cur'd by boil'd Sorrel and Eggs. All Patients whose Blood is too fluid, and who on that Account are disposed to a Phthisis, or Spitting of Blood, are cured by the frequent Use of the Juice of this Plant. Hence *Boerhaave* justly commends Sorrel, for Patients of hot, lax, putrid, and bilious Constitutions. Externally, the Leaves roasted under the Ashes, are of great Service for suppurating Tumors. The Leaves, also, when reduced to a Poultrice with fresh Butter, prove beneficial to sordid Ulcers. The native or essential Salt of Sorrel, in Taste resembling that of Cream of Tartar, is stimulating, purgative, a-

stringent

stringent, corroborating, and proper in all Fevers of the burning, continual, and putrid Kind.

Another Species of Sorrel is the *Acetosa Arvensis* Offic. *Acetosa Arvensis lanceolata*. Boerb. Ind. A. Sheeps-Sorrel. This Sorrel is much less than the former, grows in dry barren Grounds, and is possessed of much the same Virtues as the common Sorrel. It flowers in May.

Another Species of Sorrel is the *Acetosa Romana Rotundifolia* Offic. French Sorrel. In Virtues it agrees with the common Sorrel.

Acetofella, Wood Sorrel. This is mentioned in the College Catalogue by the Name of *Lujula*, or *Oxys Alba*. Ger. and is called *Oxys Flore Albo* by Boerb. Ind. A. The Juice of this Plant, according to Boerhaave, is somewhat oleous, acid, and nitrous, for which Reason it is beneficial in all hot, putrid, and pestilential Disorders. The Herb itself boiled in Water is excellent in Inflammations, Pleurifies and other Disorders of an acute Nature. It, also, corrects hot Humours and Bile; and prevents Putrefaction, so that it is proper for Nauseas and Want of Digestion, arising from putrified Bile, or any alcalescent Humour lodged in the Stomach. It is also accounted an excellent Remedy in a Diarrhæa, and Dysentery. A very good Conserve is order'd to be made of this Plant. But neither the Conserve nor the Plant are used so much as they deserve. Entire Volumes have been wrote on the Virtues of this Plant.

Acetum. Vinegar is no less universally than justly celebrated, on Account of its resolvent, anti-septic and refrigerating Qualities, for which Reason it is class'd among the Medicines of the alexipharmic and antipestilential Kind. The resolvent Nature of this Liquor is, according to Boerhaave in his Chymistry, suffi-

ciently evinc'd from its colliquating the Cartilages, Bones, and Skins of Animals, which have been long boil'd in it. Besides in *Ephemer. Nat. Curios. Decad. 1. An. 2.* we are told, that some Children have been born without the *Epidermis*, because their Mothers, during the Time of Gestation, us'd acid Aliments, and Vinegar instead of common Drink. In the Time of pestilential Disorders, Vinegar is of all others the best Preservative for Physicians, before they visit the Infected; for which Purpose they generally drink a small Quantity of it, and apply a Sponge dipt in it, to their Mouth and Nostrils, in order to correct the bad Quality of the Air. Vinegar diluted with Water, and mix'd with Honey and Rue, is said to be an infallible Antidote against various Kinds of Poisons. Thus the celebrated *Hoffman* in *Med. Rat. Tom. 2.* tells us, "That Vinegar" and the Theriaca, by discussing "and exciting a Sweat, afford speedy" and effectual Relief against all Poisons, except those of the corrosive "Kind." In all Cases where the alcalescent Acrimony of the Humours is to be corrected, or a Coagulation of the Blood to be either remov'd or prevented, Vinegar exhibited internally is of all others the most efficacious Medicine; for which Reason it is justly recommended in Fevers arising from the Stimulus of an acrid Bile, an alcalescent Salt, or a Putrefaction of the Juices. Vinegar diluted with Water, extinguishes the most violent Thirst, after other Liquors have in vain been us'd for that Purpose. Hence 'tis obvious, that it must be serviceable in acute ardent Fevers, the Small Pox, the Measles, a Scurvy arising from an alcalescent State of the Humours, hypocondriac, convulsive, and hysterical Disorders. *Hippocrates* and *Galen*, greatly extol'd Vinegar in all

Disorders of the Spleen. This Liquor, also, excites a gentle Stimulus in the Solids, expels Sweat, procures a Discharge of Urine, and strengthens the Nerves in Persons afflicted with Weakness, Languors, lethargic Disorders, and Syncope. In *Eph. Nat. Curios. Decad. 3. An. 1.* we are told, that it is customary for young Women who are too fat, to drink it in order to render themselves lean. But Doctor *Slare* assures us, that those who use it for this Purpose; generally die of Consumptions. Vinegar warm'd and drawn up the Nostrils, effectually stops excessive Sneezing. When us'd with the Aliments, it not only creates an Appetite, but also promotes Digestion. Vinegar boil'd with Wormwood, the Flowers of Elder, or Chamomile, and others of a like Nature, is by Surgeons found highly efficacious for curing an Erysipelas, Phlegmons, and putrid Ulcers; for softening and discussing glandulous Tumors; for discussing Suffusions, the Effects of Contusions, and Tumors of the Feet. For the above Disorders a Spoonful of Vinegar is exhibited internally, whilst a proper Quantity of it is us'd externally in Epithems, Fomentations, Baths, Clysters, and Gargarisms. Great Caution is to be us'd in the Choice of Vinegar for internal Use, since *Stahl* affirms, that distill'd Vinegar, by its penetrating Quality, constricts the nervous Parts. *Hippocrates* in *Tr. de Victus Ratione in acutis*, observes, that Vinegar is more proper for Men than for Women; since in the latter it creates Pains of the Uterus. It is hardly possible to explain the Manner in which Vinegar exerts its Efficacy against those Disorders which have their Seat in the Blood: First, because a Drop of Vinegar convey'd into the Vein of a live Animal, immediately proves mortal to it. Secondly, because the Mouths of the

lacteal Vessels so contract themselves as to prevent the Ingress of all acrid Substances; and Thirdly, because the Particles of Vinegar were never by *Leeuwenhoek* observed in the human Blood. But notwithstanding these perplexing Circumstances, it is sufficient for us to know from Experience, that Vinegar produces the Effects above ascribed to it. Vinegar is directed by the College to be used in the *Emplastrum Vescicatorium*, the *Unguentum Tripharmacum*, and the *Linimentum Tripharmacum*.

Acinos Offic. *Acinos multis*, Boerh. Ind. A. Wild-basil. It flowers in June. The Herb is used to check immoderate Discharges of the Menstrues, and a Diarrhæa. And the Decoction of this Plant is recommended as a good Application for Boils, and an Erysipelas.

Acmella Offic. *Akmella Abamella*. Herm. Mus. Zeyl. This grows plentifully in the Island of Ceylon and is brought thence into Europe. *Breyneus* informs us, that the Plant is diuretic, cures nephritic Pains, expells the Stone from the Kidneys, relieves Hæmaturies, Stranguries and Dysuries, and restores the Menstrues when suppressed. The Leaves are accounted most efficacious, since by their fine and volatile Parts, they provoke Urine and Sweat, open Obstructions, stimulate to Excretions, expel Stones from the urinary Passages, and if not very hard dissolve them. For these Purposes they are used by Way of Tea in pretty large Quantities, exhibiting at the same Time some other Liquor of an emollient and relaxing Quality.

Aconitum. Of this there are many Species, as the *Aconitum caruleum*, seu *Napellus primus*. Boerh. Ind. A. *Napellus* Offic. Monks-Hood. The *Aconitum Ponticum* Offic. *Aconitum Lycodanum luteum*. Boerh. Ind. A. Wolfsbane. These are both esteemed poisonous to Man and Beast.

Acorus Verus, or *Calamus Aromaticus* Offic. C. B. Boerh. Ind. Alt. Plant. Sweet Flag. This is by some esteemed a Plant of singular Virtues; for as we are informed by *Clisius* the Inhabitants of *Lithuania*, towards *Muscovy*, carry the Root of this Plant about with them, and drink no Water till they have macerated some Portion of the Root in it; and *Simon Pauli* is of Opinion, that in Camps and Armies, Dysenteries, epidemic Fevers, and even Plagues, might be in a great Measure prevented by the same Means. It is certain from Experience, that the aromatic, stimulating and inciding Qualities of this Root, are highly beneficial in Disorders of the Stomach, arising from a cold viscid Cause; in Cachexies of young Women; in Obstructions of the Menfes; in hysterick Disorders, and all Cases in which heating Medicines are proper. The Steam of Water in which this Root has been boiled, received into the Mouth thro' a Funnel, greatly relieves some Kinds of Coughs. It grows in many Parts of England in Rivulets, and marshy Places, and a great deal of it is imported from abroad. It produces Catkins in July and August. This is not thought to be the same as the *Acorus* of the Antients. It is an Ingredient in the Mithridate, and Venice Treacle.

Another *Acorus* used in Medicine is the *Acorus Adulterinus*, *Pseudo-Acorus*, *Gladiolus luteus*. Offic. *Acorus Adulterinus* C. B. P. *Acorus nostras Palustris*, Ger. Bastard *Acorus*. The Root of this is asstringent, drying and useful in all Sorts of Fluxes; and is said to be a Strengtheners of the Brain and Nerves.

The third is the *Acorus Asiaticus* Offic. *Acorus verus*, five *Calamus Aromaticus Asiaticus*, radice tenuiore, Boerh. Ind. A. Asiatic Sweet Flag. It grows both in the East and West

Indies, and agrees in Virtues with the true *Acorus*.

Adarces. This is procured in *Gallatia*, and is the Concretion of a saltish Humour bred in moist and marshy Places by Means of an excessive Drought. Its Substance is lax and porous like that of the bastard Sponge, so that it may properly enough be called the bastard Sponge of the Maishes. *Discorides* informs us, that it is used as a Topic for cleansing the Skin, in Leprosies, Sun-burning, Tetters, and Freckles because it is of an acrimonious Quality.

There is also an *Adarces* called *Adarces* Offic. Boet. Matthioli, and *Adarce* J. B. It is not known whether this is the *Adarces* of *Discorides*. This Species of Incrustation has been observed by many of the Virtuosi, particularly by Doctor *Lister*, in some Conduits at *Paris*, whence he conceives a bad Opinion of it, concluding that whatever lines the Cavities of Aqueducts with a strong Crust, would probably produce the same Effect in the Kidneys and Bladder, especially if these Parts are previously infirm and tender.

Adiantum. There are several Plants called by this Name, the first of which is the *Adiantum vulgare*, *Capillus Veneris* Offic. *Adiantum Capillus Veneris* Raii. *Capillus Veneris verus* Ger. This is the true Maidenhair, and bears Leaves resembling those of Coriander, set alternately on the Stalks. It is said to grow plentifully in *Cornwall*, but what is used here, is brought from the South of France, especially *Montpelier*. It is known that most capillary Plants abound with a neutral saponaceous Salt, which approaches to the Nature of Nitre; hence we may conceive that this Maidenhair may be possessed of great Virtues in all Disorders where Obstructions are either the Cause

Cause, or the Effect. But then it must be taken in very large Quantities, and those frequently repeated, and for a long Time. The best Way of administering it is in strong Decoctions, or Infusions. The common Method of giving it by Way of Syrup, must be very trifling, because the Quantity in a Dose must be too small to produce any considerable Effect. Few Plants have had greater Encomiums bestowed on them than this. The Leaves are said to purify the Blood by reducing the Fluids mixed with it to a just Temperature. The Plant prepares and evacuates Phlegm, as also the common Bile, and what the Antients called *Atra Bilis*. It dissipates Superfluities, resolves serous Humours, and carries them off by Transpiration. It is also diuretic, sudorific, and anti-septic, for which Reason it is properly exhibited in all Kinds of Fevers. It is a sovereign Remedy for all Disorders of the Hair, since it prevents its falling off, preserves it from Scurf or Filth, and is an Antidote against Baldness. It is also said to rouse the Functions of the Brain, by removing the Excess, and correcting the peccant Quality of the Humours conveyed to it. It purifies the animal Spirits, restrains hot and bilious Vapours, and renders those mild, which have a Tendency to become acid, acrid, or narcotic. For these Reasons it is accounted an excellent Medicine, for Persons afflicted with Want of Rest, comatous Disorders, Epilepsies, Phrensies, Madness, Melancholy, Cephalgia, and all other Disorders of the Head. It is also said to brighten the Sight, and dissipate habitual Defluxions upon the Teeth, Ears, and Glands of the Neck and Fauces. By its grateful and agreeable Smell, it exhilarates the Heart, and strengthens the vital Faculties. It is good in Disorders of the Breast, purges

the Lungs, incides and evacuates these thick and viscid Humours which adhere to the Sides of the Ramifications of the Aspera Arteria. Hence it is accounted an effectual Remedy against Coughs, Difficulties of Breathing, Asthmas, Peripneumonies, Pleurisies, Spitting of Blood, fainting Fits, and the Cardialgia. It also restores a proper Tone to the relaxed Fibres of the Stomach and Oesophagus. It evacuates such excrementitious Matter as creates Nauseas, and an Inclination to Vomit. It not only quenches Thirst, but also penetrates, moistens, and gently purges the Stomach and Intestines. It cools the Liver and Spleen, removes Obstructions formed in these Organs, dissolves the Stone in the Kidneys and Bladder. It is both a Preservative against, and a Cure for, the Jaundice and Green-sickness. It is particularly beneficial to the Parts of Generation by preventing Sterility, expelling Impurities, promoting the Menstrues if deficient, and restraining them if too copious. It produces the same happy Effects in the Fluor Albus. It is serviceable in Disorders of the Joints, and those of the nervous System; cures Stupors, Spasms, Pandiculations, and all Disorders arising from Wind lodged in the Muscles. It resolves Concretions formed upon the Ligaments of the Joints, and is for this very Reason beneficial in the Gout or Ischiadic Pains. It is by some warmly recommended in Tumours of all Kinds, whether hot or cold, cedematous, Scirrhus, Inflammatory or Erysipelatous. It is generally accounted serviceable in Wounds, Ulcers, Fractures, Luxations, and cutaneous Disorders. This is taken Notice of in the Catalogue of the *Edinburgh Dispensatory*, but it is not mentioned in that of the College.

The next is the *Adiantum Canadense*, vel *Capillus Veneris Canadensis*, Col. Med. *Adiantum Americanum*, Raii. Tourn. Boerh. Ind. A. Lemery says, that this is the most valued of all the Maidenhairs. Much the same Virtues are ascribed to it as to the preceeding.

The third is the *Adiantum Album*, *Ruta Muraria*, *Salvia Vita*, Offic. *Adiantum Album*, Raii. Hist. It is esteemed pectoral, good for an Asthma, and other Disorders of the Breast; to provoke Urine, and expel Gravel. It is a very small Plant, seldom growing above three Inches high, and with crenated Leaves somewhat resembling those of Rue.

Another is the *Adiantum nigrum*, Offic. J. B. *Adiantum foliis longioribus*, *Pulverulentis*, *Pediculo Nigro*, Boerh. Ind. A. Common black Maidenhair. It grows in shady Places, at the Roots of Trees, and upon Rocks. It agrees in Virtues with the common Maidenhair.

The last is the *Adiantum*, & *Polytichum Aureum*, Offic. *Adiantum Aureum Majus*, Raii. Hist. *Muscus coronatus major pileolo Villosa aureo*, Boerh. Ind. A. Dale says the Decoction of this Plant is recommended for a Pleurisy. In other Respects the same Virtues are ascribed to it as to the other Maidenhairs.

Ægilops. Thus distinguished, *Cerurus Mas majore Glande*, Park. Holme Oak, with great Acorns. But there are also other Vegetables, called by the Name of *Ægilops* as the *Festuca avenacea sterilis elatior*, C. B. *Ægilops Matthiolo*, J. B. Great wild Oat-grass, or Drank. This grows by Hedges, Paths, and the Sides of Fields. A Decoction of its Root in Wine drank for some Days together, is by *Tragus* greatly commended against Worms in Children. *Dioscorides*, in Lib. 4. C. 139. says, that the

Herb applied with Meal by Way of Cataplasm, cures the *Ægilops* and discusses Hardnesses. Meal wet with the Juice and afterwards dried is kept for the same Purpose.

Another Sort is the *Ægilops Narbonensis*, Lob. or *Festuca Italica*, Ger. Haver Grass. This is an Astringent and Drier without much heating. The Seed made into Malt with other Corn, communicates an intoxicating Quality to the Beer.

Æthiopsis, Offic. Ger. Emac. *Sclarea Æthiopica*, sive *Æthiopsis, laciniatis*, & *non laciniatis foliis*, Park. Theat. *Æthiopian Clary*. It is cultivated in Gardens and flowers in Summer; its Root is the Part in Use. A Decoction of the Root, relieves the Sciatica, Pleurisy, Spitting of Blood, and Hoarseness. It is exhibited with Honey in the Form of a Linctus.

Agallochum, Offic. C. B. Pin. *Agallochum verum*, Ephem. Germ. Dec. 11. An. 3. and *Lignum Aloes Vulgare*, Ger. Aloes Wood. This Wood is imported to us from India and Arabia, and is, like the *Thya*, marked with Spots. It is odoriferous, of a bitterish astringent Taste, and somewhat mottled. It is called *Calambac* in the Country where it grows, and is brought over to us in small Pieces. It is of a hard solid Texture, firm and ponderous, of a yellowish brown Colour, with several black or purple coloured resinous Veins interperled, of a bitterish, hot, aromatic Taste, but of no strong Smell till it is burnt. Most Botanists take the *Agallochum* of the Antients to be the Aloes Wood of the Shops; others suppose the *Aspalathum* to be the same, and others, especially the *Arabians*, make several Kinds. *Caspar Bauhine* divides this Wood into three Sorts, the first he calls the

finest Agallochum which is reserved for the Use of the Indian Kings. The second is what is sold in the Shops; and the third the wild Agallochum. *Pomet* tells us, that there are several Sorts of it, but the best is the Agallochum of the *Indies*, which comes from *Calecut*. The finest is the black Kind, of a changeable Colour, full, heavy, solid, and thick, which cannot be whitened, and is with Difficulty set on Fire. Others affirm, that we cannot have the true Aloes Wood, because it was swept away by the Deluge; whereas others assert that we cannot have it, only because it grows in Deserts, and on inaccessible Rocks and Mountains. But this is absolutely false, since the Wood is brought in great Quantities from *Surat*. It is observable that the Trunk of the Tree is of three Colours. The Wood which lies immediately under the Bark, is of a black Colour, solid, heavy, and almost like Ebony. The second, which is a light veiny Wood, and of a tanned Colour, is what we call *Calambac*, or true Aloes-wood. The third Sort which is the Heart, is very scarce and dear. *Dioscorides* in *Lib. 1. Cap. 21.* informs us, that chewing this Wood, or rinsing the Mouth with a Decoction of it, makes the Breath sweet; and that when dried and powdered, it serves as a Perfume for the whole Body, and is used in Suffumigations instead of Frankincense; that the Weight of a Dram, drank in some proper Liquor, cures the excessive Humidity, Relaxation, and burning Heat of the Stomach, commonly called the *Heart-burn*; and that when drank in Water, it relieves those afflicted with Pains of the Side or Liver, or labour under a Dysentery or Gripes.

Agaricus sive Fungus Laricis, C. B.
Agaricus ex Larice, Park. *Agaricum*,

J.B. *Agaric*. This is a kind of Fungus growing on the Larch Tree, which produces the *Venice Turpentine*. It is imported from *Italy*, *France*, and especially *Dauphiny*, and the southerly Parts of *Germany*; but that is accounted best which grows in *Tartary*. It requires a whole Year to acquire its due Bulk, and is taken off the Bark of the Tree when it begins to become dry, and chop'd; after which it is exposed to the Sun for two or three Weeks, in order to be whitened. Then it is beaten with Sticks, that no Chinks may appear in it. Sometimes it is rubbed over with Starch, or well triturated *Agaric*, but this is by most looked upon as a bad Sign. It is generally sold in Lumps as big as the Fist, of a Kind of a round angular Form, covered with a callous Bark, white within, at first of a sweetish, but soon after of a bitter, acrid, nauseous, and gently astringent Taste. This Species is called the Female in Contradistinction to the male or spurious *Agaric*. It cannot without Difficulty be reduced to a Powder; and before it can be duely triturated, requires an Admixture of the Gums. When immersed in an Acid, it produces an Effervescence, and is converted into a cretaceous Earth. In *Hist. Acad. R. des Sciences An. 1714.* we are informed, that it contains a subtil acrid Salt, mixed with viscid Particles, so that because it remains long in the Intestines, its Virtues are conveyed to the Chyle and Blood; for which Reason, if a Decoction of it in Ale is given to Nurses, it purges the Children whom they suckle. For this very Reason, also, the Antients successfully used *Agaric* in all Diseases of the Head, arising from a cold Cause. It is ranked among the phlegmagogue Purgatives, and is particularly recommended in Coughs and Asthma,

mas, where purging is expedient. But as it produces long continued Nauseas, and adheres to the Stomach on Account of its Viscidity, it is rarely exhibited by itself without being previously corrected with Aromatics, as Ginger, Cinnamon, Mace, and others of a like Nature. Besides, as it operates slowly, it is generally assisted by the Addition of other Purgatives. The most common Method of using it, is in Form of Troches or Pills, which ought always to be recent, otherwise they lose a great Deal of their Efficacy. *Prosper Alpinus*, in *Med. Ægypt. Lib. 4. Cap. 15.* informs us, that the *Ægyptians* with Success exhibited *Agaric* with a certain Portion of Myrrh, in a Decoction of Penny-royal. As the male or spurious *Agaric*, and the other Species of it, are rarely or never used in Medicine, we shall take no farther Notice of them.

Ageratum, *Eupatorium Mesues*, Off. *Ageratum foliis serratis*, C. B. Boerh. Ind. Alt. *Ageratum plerisque*, *Herba Julia quibusdam*, J. B. *Ageratum Vulgare*, sive *Costus Hortorum Minor*, Park. Maudlin. The whole Plant has a strong tho' not an ungrateful Scent. It is a Native of *Italy*, and the warmer Countries, but with us only grows in Gardens, and flowers in *July*, and *August*. It is of a bitter Taste, of a warming and drying Nature, beneficial in Disorders of the Stomach, serviceable in the Jaundice and Obstructions of the Menfes, diuretic and anthelminthic. *Baerhaave* informs us, that it is possess'd of the Virtues of Costmary and Tansey, and is an Ingredient in all capital Compositions; that its Seeds have been exhibited with Success instead of Worm-seeds; that its distilled Water and Spirit, diffuse a most fragrant Smell, and that the Plant is used in Syrups, Oils, Infu-

sion, Decoction, Powder and Pills. But Mr. *Boyle* observes it to be prejudicial to the Eyes. *Dioscorides* in *Lib. 4. Cap. 59.* informs us, that a Decoction of this Plant is highly beneficial in Fomentations, and that the Steam of it when burnt, provokes Urine, and mollifies Indurations of the Uterus. *Oribasius* in *Med. Collect. 1. Lib. 15. Cap. 1.* informs us, that the *Ageratum* is a Digestive, and gently mitigates Inflammations. The other Kinds of Maudlin are not used in Medicine, and therefore need no farther Notice.

Agnus Castus, *Vitex*, Offic. *Agnus folio non serrato*, I. B. Raii. Hist. *Vitex Agnus Castus*, Rand. Ind. *Vitex foliis angustioribus*, *Cannabis modo dispositis*, C. B. Boerh. Ind. Alt. Chastetree. It grows in the warmer Climates, as *Italy*, *Naples*, and *Sicily*, and flowers in *August*. *Dioscorides* informs us, that this Shrub, received the Name of *Αγνος*, or Chaste, because the Matrons who liv'd chaste during the *Thesmophoria*, or Feasts of *Ceres*, used to lie upon it. Not only the Seeds, but also the Flowers and Leaves, are of an acrid and moderately astringent Taste. The Antients highly extolled it for repressing the Violence of venereal Inclinations, as also on Account of its heating, drying, and de-obstruent Qualities, and accordingly employed it, as one or other of these Intentions was to be pursued. But the Moderns generally look upon these Recommendations as ill grounded. *Hippocrates*, indeed, in *Lib. de Morb. Mulier.* recommends the Seeds of this Shrub for bringing away the Secundines. Some of the Moderns, also, extol it, as beneficial in a great Variety of Disorders; but as Experience has given it no considerable Sanction, the more skilful Physicians seldom use it in their Practice.

As the Seeds of this Shrub are of an heating and stimulating Nature, they should rather seem to augment venereal Inclinations, at least in cold Patients; for we observe that Persons languid in this Respect are to be stimulated and roused; so that it only seems to be possessed of an antiprothodific Quality, in so far as it is an excessive Drier in hot Subjects.

Konigius, in his *Regnum Vegetabile*, gives the following just Account of the Virtues of the *Agnus Castus*.

"It operates by its volatile and as it were camphorated Salt, whence it is discutient, excites the Menstrues, by Incessions mitigates the Disorders of the Pudenda, discutifies the venereal Fomes in hot Subjects, and by drying removes it, in so far as it volatilizes the oleous Parts of the Semen, and causes them to transpire. It also represses the Flatulences joined to the Semen in the same manner as Camphire and Rue do."

Agrifolium, Offic. Ger. Emac. *Aquifolium baccis rubris*, Boerh. Ind. Alt. *Agrifolium sive Aquifolium*, Park. Theat. The Holly-tree. The Berries of Holly are hot and dry, of thin Parts and expel Wind. They are recommended for the Cholic, inwardly taken they bring away by Stool thick phlegmatic Humours. Holly beaten to Powder and drank, is good for all Fluxes of the Belly, as the Dysentery and the like.

Agrimonia, *Eupatorium Græcorum*, Offic. *Agrimonia Vulgaris*, Park. Theat. *Agrimonia Officinarum*, Boerh. Ind. Alt. *Eupatorium veterum seu Agrimonia*, C. B. Pin. *Agrimonia*. This is the *Eupatorium of Dioscorides*, *Galen*, and the ancient Greeks. It grows in Hedges and the Borders of Fields, and flowers in June and July. Some think it received the Name *Agrimonia*, from the large Quantity of it produced in *Agris* in

the Fields, and the Appellation of *Eupatorium* either from King *Eupator*, or from the first Discoverer of its Virtues. But be this as it will, 'tis certain that *Agrimonia* is possessed of many singular Virtues. It contains a subaustere, subastringent and aromatic Juice; and is justly recommended for its aperient, deterfive, vulnerary, corroborating, and mildly operating Qualities. Hence it is deservedly dignified with the Epithets of hepatic and visceral, for by restoring the Tone and Strength of the Fibres, it removes Obstructions arising from too great a Relaxation of the Vessels. Hence a Decoction of it is highly beneficial in Scurvies arising from Relaxation, hepatic Fluxes, bloody Vomiting, and internal Hemorrhages, where Astringents are proper. It is by some singularly extol'd in Discharges of bloody Urine, accompanied with Ulcerations of the Kidneys. *Riverius* gave the Herb reduc'd to a Powder, in Incontinencies of Urine. An Infusion of recent *Agrimonia* with Water, is accounted a Medicine which acts by a gentle aromatic Stimulus, without any astringent Quality, and which when drank every Morning, proves beneficial to hypochondriac and hysteric Patients; is a good Reviver of the Spirits, and by its resolvent Quality, removes that peccant Matter, which adhering to the Hypochondria, is the Cause of Flatulences, Anxieties, and Sighs. If Whey, in which the recent Herb has remain'd for some time, is constantly us'd during the Summer, it is accounted an excellent Purger of the Body, and a Preservative against many Diseases; for it is more grateful and less weakening than Whey alone. The express'd Juice of this Plant boil'd, is a grateful and excellent astringent Medicine. Tho' its distill'd Water seems only to have a gently

gently aromatic Quality, yet *Morison* in his *Historia Plantarum Universalis*, informs us, that Cardinal *Bembo* found nothing more beneficial than its continual Use, for expelling Sand from the Kidneys. *Doleus's* Assertion of its being a Specific in Madness, is sufficiently confuted by Experience, as is shewn by *Garidel* in his *Histoire des Plantes*, &c. The Plant is beneficially applied externally to any Part to be strengthen'd by astringent Medicines. Hence a Decoction of it in Form of a Cataplasm, contributes to the Resolution of inflam'd Tumors and Contusions. Cataplasms of it boil'd in Vinegar or Wine, and applied to the Scrotum, are highly celebrated in Inflammations of the Testicles.

Alaternus. The Name of a Plant, of which there are four Species, the first of which is the *Alaternus*, Offic. *Alaternus major* & *minor*, Park. Theat. *Alaternus*, 1. *Clusii*, & *Minori folio*, Boerh. Ind. A. Evergreen Privet. It grows in Hedges, and is cultivated in Gardens. It contains much Oil and Phlegm, and but little Salt. It is of a deterfive, astringent, and cooling Nature, and is used in Gargarisms for Inflammations of the Mouth, and for the Quinsey. The Root moderately binds the Belly.

The second Sort is the *Alaternus Hispanicus*, *Celastrus diæa*, Boerh. Ind. A. *Celastrus*, Offic. *Celastrus Theophrasti*, Ger. Emac. Park. Theat. The Staff-tree.

The third Sort is the *Cassina*, Offic. *Herba Cassiana famem sitimque retardans*, J. B. Cassiny. It grows in *Carolina*. It is accounted a very good Medicine for the Small Pox, and restraining immoderate Fermentation of the Blood, without putting too great a Check upon the expulsive Faculty. It promotes Ex-

pectoration, preserves the Lungs, and keeps off the Small Pox from the Head and Throat.

The fourth Sort is the *Perygua*, Officinar. Mant. The *Cassio-Berry-bush*. It is found in *Carolina*. The Fragments of the dried Leaves, and the Powder of the Stalks, are used. Sometimes it purges, at other times excites Vomiting, or promotes insensible Perspiration, still acting as Nature inclines. It is accounted an excellent Specific in the Diabetes. A Tea made of the Herb is good in the Nephritic Colic.

Alceanna, Offic. *Ligustrum Orientale*, five *Cyprus Dioscoridis* & *Plinii*, Park. Theat. *Baccifera Indica baccis oblongis in umbellæ formam dispositis*, Raii Hist. Eastern Privet. This is the *Kenna* of the Turks and Moors. Its medicinal Virtues are emmenagogue and hysteric, and accordingly is used in the Eastern Countries, to cause Abortion, and to bring away dead Children. The Leaves have an astringent Quality, by which they heal Ulcers in the Mouth, being chewed therein; and are good for Carbuncles, and other fiery Inflammations if applied in a Cataplasm. The Decoction of them is good for Burns. The Flowers bruised in Vinegar ease Pains of the Head, being applied to the Forehead.

Alcea, Offic. *Alcea Vulgaris*, J. B. Raii Hist. *Alcea vulgaris major, flore ex rubro roseo*, Boerh. Ind. Alt. Vervain Mallow. This Species of Mallow differs from the common Kind in having its Stalks more hairy and growing more erect; the lower Leaves are smaller and roundish, serrated about the Edges, and growing on long Foot-stalks; the higher they grow the Foot-stalks are the shorter. The upper Leaves are cut into five deep Segments; the Flowers are larger, paler, and not streaked like those of the common

Mallow. The Cheese-like Seed-Vessel is larger and blacker; the Root is hard, woody, and spreads in the Ground. It grows in uncultivated Fields and Hedges, and near High-ways. It flowers in *July* and *August*, and in Autumn produces Seeds; it is possess'd of the Virtues of the common Mallow, and its Root, Leaves, Flowers, and Seeds may be us'd as Emollients. Its Root is particularly celebrated against Dimness of the Eyes by Empirics, so that some foolishly believe that a Portion of it suspended about the Neck, quickens and preserves the Sight. But this hardly seems credible. In Inflammations and Dryness arising from them, this Plant proves beneficial as other emollient, mucilaginous, laxative, moistening, and demulcent Medicines. Hence 'tis obvious that its Root, drank in Wine or Water, proves beneficial against Gripes, and Erosions of the Intestines.

Alchimilla, Offic. Ger. Rauh Hist. *Alchimilla Vulgaris*, C. B. *Alchimilla Major Vulgaris*, Park. Ladies Mantle. It grows in Meadows and pasture Grounds, flowers in *May* and *June*, and in *July* and *August*, and produces its Seeds. On Account of its astringent, viscid, and glutinous Juice it is class'd among the vulnerary Plants, both applied externally with other Substances, and exhibited internally in vulnerary Potions, and Decoctions; for it inspissates the thin Blood, and is for that Reason highly beneficial in the *Fluor Albus*, and immoderate menstrual Discharges. A Decoction of it is useful for washing Wounds, which may, also, be advantageously cover'd with a Cloth dipt in the same Decoction. *Bauhine* informs us, that this Plant is of so powerful a conglutinating Quality, as to cure Ruptures of the Intestines, especially in Children; for which Purpose the dry Powder is ex-

hibited in the Decoction, or the distill'd Water of the Plant. The same Powder exhibited in a Spoonful of Wine or Broth for fifteen or twenty Days, is successfully prescrib'd for Women whose Sterility proceeds from an excessive Moisture of the Uterus, on Account of which the Semen cannot be retain'd. From what has been said 'tis obvious, that this Plant is proper in consolidating Clysters for the Cure of Dysenteries. Women in order to render their lax and flaccid Breasts firm and solid, apply to them a Cloth dipt in the Decoction of this Plant.

Alectorolophus, Offic. *Christa Galli*, Ger. Emac. *Pedicularis five Christa Galli lutea*, Park. Theat. *Pedicularis pratensis lutea*, vel *Christa Galli*, Boerh. Ind. A. Yellow Rattle. It grows in barren Sorts of Pastures, flowering in *June*; the Seed is ripe in a short Time. It is accounted good for a Cough boiled with husk'd Beans and sweeten'd with Honey. It cures Dimness of Sight by putting a whole Seed into the Eye, where the Seed causes no Disorder, but takes off the Mist or Cloud upon itself. It changes Colour, and from black begins to turn white, then swells and comes out of itself.

Alkekengi Halicacabum, Offic. *Alkekengi Officinatum*, Boerh. Ind. Alt. *Solanum vesicarium*, C. B. Pin. *Solanum Halicacabum Vulgare*, J. B. Winter Cherry. It grows with us in Gardens, where it is easily propagated, flowers in *July* and *August*, and bears ripe Fruit in *September*. The Taste of the Leaves is acrid and bitter, whereas that of the Fruit is acid, and afterwards somewhat bitter. The Seeds are, also, acrid and somewhat bitterish. The whole of the Fruit is esteem'd a celebrated Remedy against nephritic Pains, and calculous Disorders; it lubricates the urinary Passages; expels Stones, and

and Gravel; contributes to the Cure of exulcerated Kidneys, temperates the Acrimony of the Urine, removes the Strangury and Dyfury; and is for these Reasons mix'd in a great many Compositions, appropriated to Disorders of the Liver, Bladder, and Kidneys. *Caspar Hoffman* informs us, that its diuretic Quality is so well known to the poor People of *Germany*, that for that very Purpose they devour large Quantities of it. According to *Dioscorides*, an Infusion or Decoction of it with Whey is an effectual Remedy against the Epilepsy. When reduc'd to a Powder and taken in white Wine, or that of Juniper, it is highly efficacious in exciting a Discharge of Urine, and relieving those afflicted with the Dropsy, Jaundice, Gout, or Colic. Both the Leaves and Fruit are with great Advantage applied to erysipelatous Disorders of the malignant Kind. These Effects sufficiently evince that it is of an aperient Quality, which when the Medicine is us'd internally, operates principally by Urine. There are various Methods of using this Remedy. Thus *Tournefort* exhibits five or six of the bruised Berries, in an Emulsion. *Arnaldus de Villanova*, who is said to have reviv'd the exploded Use of this Plant, found the Efficacy of a Wine prepar'd from it, in a Retention of Urine, which would yield to no other Medicines. A proper Quantity of the Seeds alone, bruised and drank with Coffee or Tea, is highly extolled for purging the Kidneys. Quacks and Mountebanks, as we are inform'd by Dr. *Freind*, pretend, that they can collect all the peccant Humours fluctuating in the Body, by rubbing any particular Part with *Alkekengi*, and when by this Means they have excited an Heat and Inflammation; they demand their Reward as if the Disease was cur'd by them, but the Part be-

ing anointed with Oil, is forthwith freed from the Pain.

Alliaria, Offic. Ger. Park. C. B. Pin. *Hesperis allium rodolens*, Boerh. Ind Alt. Sauce-alone, or Jack by the Hedge. It grows in Hedges and Bank-sides, and flowers in *May*. This Herb attenuates, incises, and greatly resists Putrefaction. Infusions of it internally us'd, are far preferable to the Bezoar Stone as a Diaphoretic, and the Herb itself makes an excellent Ingredient in Spring Sallads. When applied externally after it is bruised, especially with Salt and Oxyrate, it is highly beneficial against a Tendency to Putrefaction in carcinomatous Ulcers, and Gangrenes, in which Cases it supplies the Place of *Scordium*, tho' it is somewhat less efficacious. There is but little Virtue in the dried Herb, for which Reason it is to be gather'd in the End of *April* or the Beginning of *May*, and after it is dried a Day or two in a Shade, cut small and the Juice forthwith express'd, either in a Mortar or Press. This Juice when put into Bottles with a little Oil upon it, may be kept for three Years. It may, also, be inspissated over a Fire, and kept for several Years for the same Purposes. *Fabricius Hildanus* informs us, that this Juice; whether simple or inspissated, is an excellent Ingredient in Ointments destin'd for Gangrenes, and other putrid, fordid, and malignant Ulcers. Hence we justly deduce, that it is of a resolvent Quality; for if the recent Herb is triturated in any proper Liquor, it proves diuretic; when drank in *Hydromel*, it digests and attenuates thick and viscid Humours in the Breast. For inveterate Coughs, it is us'd as a Linctus, with Resin and Honey; and it is said to prove highly beneficial to asthmatic Patients. Some put its Leaves into Clysters design'd for removing either Colic or nephritic

Pains, in the former of which it remarkably dissipates the Flatulences ; and in the latter, surprisngly mitigates the Pain. The Juice of the Plant, or the Powder of its Seeds, blown up the Nostrils, by exciting a Sternutation in epileptic and comatous Patients, restores them to themselves. Externally, the Seeds bruised with Vinegar and applied by Way of Plaister to the Abdomen, rouses Women under hysterick Suffocations. The Seeds also put into a Lincloth, and us'd by Way of Pessary, are said to produce the same Effects. Upon a chymical Analysis this Plant yields an acid Phlegm, a concrete volatile Salt, a fix'd lixivial Salt, and a large Quantity of Oil and Earth.

Allium, Offic. Ger. *Allium sativum*, C. B. Boerh. Ind. Alt. and *Allium vulgare* & *sativum*, J. B. Garlick. The whole Plant, and especially the Root, is of a strong and offensive Smell. Garlick is an acrid Plant abounding with volatile Salt, especially its Roots, whose distinct Portions, generally call'd Heads or Bulbs, are by Physicians, for the most Part prescrib'd in Number ; and not according to their Weight. Garlick is proper when the Intentions of stimulating, heating, resolving, and dissolving are to be pursued : Hence the crude Root is generally us'd when the Stomach is cold or disorder'd by an inactive Mucus, or by Crudities of the viscid and acid Kinds: This Root when boil'd, becomes milder, and is recommended against Worms of the Intestines, and if boil'd in Milk is said to be a powerful Alexipharmic, when any poisonous Quality of the Air is apprehended. This Plant is by some call'd the *Theriaca* of the Country People, to whom it is not only grateful, but also by its volatile Salts, attenuates the Crudities of the *primæ viæ*, assists Concoction, and promotes insensible Per-

spiration. Hence *Pliny* justly asserts, that it guards against the Misfortunes arising from the Changes of Waters and Climates, and that it renders the Body of a fresher and more blooming Colour. Soldiers and Sailors often experience the happy Effects arising from the due Use of this Plant, as we are inform'd by *Portius in Lib. de Sanitate Milit. Tuenda*. From what has been said, 'tis sufficiently obvious, that Garlick is of great Efficacy in exciting an Appetite, and procuring Strength to the Stomach. Hence, as are we told in *Lettres edifiantes & curieuses. de quelques Missionnaires*, it prov'd a sovereign Remedy in a Lyentery, or Excretion of the Food without any Change. *Fr. Hoffman*, also, in *Med. Rat. Tom. 2.* informs us, that it is an instantaneous Remedy for Dyenteries produc'd by eating putrid Flesh. In the *Ephemerid. Natur. Curios. Decad. 2. An. 8. Obs. 202.* we are assur'd, that it prov'd effectual for dissolving Milk coagulated in the Stomach. In flatulent Colics arising from cold, acid, or viscid Causes, it has often prov'd beneficial, especially when a Soop is prepar'd of it with Oil of Olives, and a little pure Wine. *Galen* gives us an Account of a labouring Man, who being seiz'd with the Colic, cloth'd himself warm, eat some Garlick with Bread, and work'd at his usual Business the whole Day ; by which Means he was freed from his Disorder. *Ramazzini* in his Treatise of the Diseases of Tradesmen, informs us, that long protracted Quartans have been cur'd by the Use of Garlick, and a large Quantity of unmix'd Wine. In a Word, Garlick is properly exhibited in Cases where the Body requires a Stimulus, or where the Viscidity of the stagnant Humours produces the Disease ; in exciting the Menfes, for Instance, provoking Urine, and removing Coughs. The judicious *Sydenham* in-

informs us, that Dropfies have been cur'd by the Use of Garlick alone, without the Assistance of any other Evacuants. Many afflicted with the Stone, find singular Relief from three, four, or five Bulbs of Garlick, taken with a Glass of Brandy, which Remedy some order to be repeated every Month, at the new Moon; others a Day before the new Moon, and others every Week, on the Day immediately preceeding the Quadratures of the Moon, as we may find by consulting the *Ephemerides Natur. Curios. Cent. 1. Obs. 55. Vol. 2. Bartholin. Epist. Cant. 3. and Hoffman de Remed. Domest.* Garlick bruis'd with green Coriander, and drank in unmix'd Wine, is said to prove a Stimulus to Venery; for which Reason *Carolus de Aquino* in his *Nomenclator Agriculturæ*, informs us, that the *Athenians* us'd to give it to their Cocks before they began to fight. Travellers, also, use it in order to render themselves more brisk and vigorous; for which Purposes it is also given to Horses. It is us'd internally, not only boil'd and in spirituous Liquor, but also crude. *Zacutus Lusitanus* gives us an Account of an old Man, who in the Winter Time having travell'd thro' the Snow, till the innate Heat of his Stomach was almost extinguish'd, fell dangerously ill. But as the hottest Remedies were of no Efficacy in restoring this Heat, *Zacutus*, according to *Avicenna's* Directions, gave him dry Garlick cover'd with Honey, by which Means he became considerably better in four Days, and by persisting in its Use for a Month, had his Health perfectly recover'd. The external Use of Garlick is also highly recommended in many Cases, since by its stimulating Acrimony, it resolves, opens, and attracts. Garlick when reduc'd to the Form of an Ointment with Oil of Olives, is extoll'd for resolving

cold Tumors, and removing Corns on the Feet. According to the celebrated *Prosper Alpinus*, the *Egyptians* drop the warm Juice of Garlick into the Ears, in order to remove inveterate Deafness, and Ringing. With recent Garlick bruis'd they, also, cure recent Wounds. They also apply burnt Garlick with Honey for the Cure of Scald-heads. Infestions in Decoctions of dry Garlicks with its Stalks, are highly beneficial in exciting the Menies, and the *Egyptians* frequently procure an Expulsion of the Secundines, by ordering the Steam of the Decoction, or the Smoak of the Root burnt upon Coals, to be receiv'd into the Uterus. *Arnaldus de Villanova* tells us, that in Head-achs, arising from Phlegm, Garlick bruis'd, heated upon a Tile, and applied to the Part affected, removes the Pain; and that when boil'd and fried with a little Pennyroyal and Pepper with Oil, it removes an *Hemicrania*, when applied to the Part affected. Hogs-lard form'd into an Ointment with Eggs and two or three Heads of Garlick, is said to prove an almost immediate Cure for Hoarseness, if it is applied warm at Night to the Soles of the Feet, before a brisk Fire, taking Care to keep the Feet warm in the Night Time; for this Purpose the Loins are also to be anointed with the same Ointment, after the Patient is in Bed. Obstinate intermittent, and even quartan Fevers, when all other Means have fail'd, are often happily remov'd by applying bruis'd Garlick to the Wrists, where it produces a Blister, which being open'd, the peccant Matter is in some Measure eliminated. But according to *F. Hoffman*, this Practice is not to be us'd without the greatest Circumspection; because the Garlick produces violent Inflammations, which may be productive of Symptoms more terrible than the original Disorder.

The same Observation is also made in *Eph. Nat. Curios. Dec. 2. An. 9. Obs. 127.* where there is also Mention made of a Tooth-ach, considerably mitigated by exciting a Blister on the Elbow, by Means of bruised Garlick. According to *Platerus*, Garlick is to be applied to the Wrist on the same Side with the affected Tooth. *Bartholine* informs us, that the wandering Pains of scorbutic Patients are dissipated by rubbing their Joints with the Juice of Garlick. *Bartholine* also, informs us, that Garlick with Oil of Scorpions, is us'd by Way of Cataplasm to expel the Stone, and Urine. *Etmuller* says, that a Decoction of this Plant in Milk, us'd by Way of Fomentation to the Anus, brings away the Worms of the Intestines, and that the Hungarians in the Camp-Fever, take a Bulb of Garlick, which they saturate with Spirit of Wine, and bruise. With this Poultice, they strongly anoint the Patient's Body; then disposing him to sweat by laying a large Quantity of Cloths upon him, he is forthwith reliev'd. *Sydenham* says, "That among the various Medicines which make a Revulsion or Derivation from the Head, none seems to operate so powerfully as Garlick applied to the Soles of the Feet. — In Adults, therefore, labouring under the Small Pox of the confluent Kind, I generally apply sliced Garlick wrapt up in a Cloth, to the Soles of their Feet, from the eighth Day till the Disease is no longer dangerous. This Application is to be renew'd every Day;" for by its strongly stimulating Quality, it augments the Motion in the Part to which it is applied, makes the Humours tend towards it, and by exciting Blisters eliminates the acrid and foreign Matter, which being mixed with the Mass of Blood, creates such Com-

motions in the Body. Hence the Reason is obvious, why Garlick is successfully us'd as a Cataplasm, for maturing pestilential Buboës. But Garlick not only sometimes fails to produce the desir'd Effects, but also, when immoderately or unseasonably us'd, proves highly injurious to Health. Thus in *Ephim. Nat. Curios. Vol. 4.* we are inform'd, that an immoderate Use of it brought on a Cholera and a Cardialgia, and *ibid. Dec. 4. An. 6. Obs. 8.* we are told, that eating it to Excess produc'd a Discharge of Blood by the urinary Passage. In *Act. Med. Berol. Dec. 2. Vol. 9.* unusual Tumors of the Hands and Feet, are observ'd to be excited by an Infusion of Garlick in Malt Spirits, frequently applied externally in the wandering Gout. As Garlick throws the Humours into violent Commotions, and strongly stimulates the Solids, so 'tis sufficiently obvious, that it ought never, without the greatest Precaution and Circumspection, to be recommended to Persons of hot Constitutions, those whose Humours are easily put into Commotions, and those, the Compages of whose Solids is weak. Hence we understand in what Sense the Antients are to be taken, when they asserted that Garlick was prejudicial to the Head, Eyes, and Kidneys. There is still another Quality in this Plant which renders its Use, especially when raw, improper for weak Persons; which is the Viscidity of its Juice, which requires a strong Stomach in order to subdue it; for which Reason we may justly affirm, that it affords little or no Nourishment to the Body. Its Viscidity is sufficiently evinc'd by the Experiments of *Du Hamel*, who found its Juice to cement and join the divided Parts of Glass and China. Its Tendency to generate Flatulences, seems also to depend upon its Viscidity. The moderate

derate Use then of Garlick, is only to be permitted as a Sauce, or a Medicine, but not as a daily Aliment; for it is not without Reason, that *B. Swalve* in his *Querela Ventriculi Renovata*, represents the Stomach as making the following Complaints. "How much Labour have I from Garlicks, Onions, and Leeks, whilst I hardly ever receive any Advantage from them, except when oppress'd with thick and viscid Humours?" When therefore Heat is not to be increas'd in the Body, the Acrimony and Strength of Garlick are greatly to be suspected; for in other Cases, as *Hippocrates* observes in *Tr. de Vict. Rat. in Acut.* "Garlick produces Heat, and Flatulences about the Thorax, Heaviness of the Head, Anxiety, and if there is any previous Disorder it augments it." It is probably at all Times safer to use Garlick boil'd, than crude. From what has been said, we understand, that the Antients only call'd Garlick Purgative, because it resolv'd the viscid and tenacious Matter in the *Primæ Viæ*, and by that Means dispos'd it for Evacuation. *Hippocrates* recommends the eating of Garlick, either when a Person is drunk, or inclin'd to go a drinking; in the former Case, because by promoting Perspiration, it dissipates the Intoxication; in the latter, because by strengthening the Stomach, it subdues the Liquor, and expels it either by Urine, or the cutaneous Pores. A Syrup, and an Oxymel, are directed to be made of Garlick, in the last London Dispensatory.

Besides the common Species of Garlick, *Botanists* have taken Notice of many others, as the *Ophioscorodon*, Off. *Allium sativum alterum*, sive *Allioprassum caulis summo circumvoluto*, Boerh. Ind. A. Vipers Garlick, or Rocambole. This is cultivated in Gardens, and flowers in July. The

Root and Kernel are us'd in Medicine, and are said to agree in Virtues with the preceeding; but this is somewhat milder.

The *Scorodoprassum*, Off. *Allium sphaericeo Capite, folio latiore, sive Scorodoprassum alterum*. Boerh. Ind. A. Wild Leeks. This Species agrees in Virtues with the other, but is milder.

The *Ampeloprassum*, Off. French Lack. This flowers in June, and the Root is recommended by *Dioscorides* against the Bites of Serpents. *Dale* thinks this the true *Ampeloprassum*.

The *Victorialis*, Off. *Allium latifolium montanum maculatum*, Boerh. Ind. A. Broad-leav'd Mountain Garlick, or spotted Ramsons. It flowers in June, and agrees in Virtues with the other Species.

There is also the *Allium Sylvestre*, Off. Crow Garlick, to which the same Virtues are ascrib'd, as to common Garlick.

The *Moly*, Off. *Allium angustifolium umbellatum album*, Tourn. *Moly angustifolium umbellatum*, Boerh. Ind. A. *Moly of Dioscorides*. *Dioscorides* recommends this made into a Pessary, in Relaxations of the Uterus.

The *Moly Theophrasti*, Off. *Moly latifolium liliflorum*, Boerh. Ind. A. *Allium latifolium, liliflorum*. Tourn. Inst. *Moly of Theophrastus*. The Virtues are the same as those of the preceeding.

Alnus, Offic. Ger. *Alnus Vulgaris*, Park. Theat. J. B. *Alnus Rotunda folia glutinosa viridis*, C. B. Pin. Boerh. Ind. Alt. The Alder-Tree. It grows in moist and marshy Soils; the Wood becomes black in a Solution of Vitriol. Alder then is possess'd of the astringent Property of Galls, and may for that Reason be us'd in making Ink. But this astringent Quality is most considerable in the Fruit, and especially in the Bark, which when

when macerated in Water with old rusty Iron, or the Scorise of Iron, serves to tinge Leather with a black Colour. In the *Ephim. Nat. Curios. Vol. 3. Obs. 16.* we are told, that if the yellowish Bark, not only of the Roots, but also of the Branches, is boil'd in common Water, it is of singular Efficacy in carrying off the Water of dropfical Patients. *Pliny in Lib. 24. Cap. 10.* informs us, that the Leaves taken out of boiling Water and applied, are an effectual Cure for Tumors. But this Observation can only hold true in Cases, where Repellents and Astringents are proper. *Barbarus* in Comment. on *Vitruvius* informs us, that some cover the Floors of Rooms with its Leaves besprinkled with Dew, in order to destroy Fleas; for the Leaves when budding, contain a Kind of pinguious tenacious Humours, to which the Fleas adhering, as it were to Bird-Lime, are killed. *Tournefort* in his *Plant. Paralip. Tom. 2.* informs us, that the Leaves of this Tree, are in the Alps us'd in paralytic Cases, especially when the Disorder has proceeded from external Causes, as lying in the Fields or damp Houses. For this Purpose some Sackfuls of the Leaves dried either in the Sun, or in an Oven, are spread for the Patient to lie upon, being sufficiently cover'd therewith, and with warm Cloths, till he has sweated plentifully. This Remedy is, also, accounted good for the Rheumatism, Sciatica, and other Disorders of a similar Nature.

There is another Species of Alder, called the black Alder-tree, by *Dale* distinguished thus. *Frangula, alnus Nigra*, Offic. *Frangula*, Boerh. Ind. Alt. *Frangula sive Alnus Nigra Baccifera*, Park. Theat. Raii Synop. It grows in such Woods as are thick and moist, flowers in May, and produces ripe Fruit in September. The inner Bark of this Tree,

which is of a yellow Colour, and tinges the Spittle like Rhubarb, is said to purge serous and bilious Humours, and is greatly commended for the Dropfy and Jaundice, but it ought to be corrected with proper Aromatics, otherwise it will produce violent Gripes and Vomitings. When bruised in a Mortar, and mixed with Vinegar, it is accounted good for the Itch, the Parts affected being washed with it.

Aloe, Offic. C. B. Pin. Boerh. Ind. Alt. *Aloe Dioscoridis*, Colum. *Aloe Dioscoridis & Aliorum*, Sloan Cat. Jam. Aloes. From this, and some other Species of the Plant, is obtained the *Aloes of the Shops*, which is a concreted brownish or blackish Juice, of a bitter Taste and disagreeable Smell. It is imported into Europe in Sheeps-skins, or large Gourds. According to *Garidel* from *Hermannus*, the purest, or what is called the Succotrine Aloes, is the Juice gently pressed from the entire Leaves separated from their Roots; and inspissated in the Sun after it has deposited its most feculent Part. This Sediment when poured into another Vessel, and inspissated in the Sun, acquires an harder Consistence than the former, and is called *hepatic Aloes*. And the Sediment of this second Species, when inspissated, is called *Caballine* or *Horse-aloes*. But other Authors are of Opinion, that these different Sorts of Aloes, are produced of different Species of the Plant. The best Aloes is that which is pinguious, of a dark Colour, in some Measure friable, in Smell resembling that of Myrrh, and which when pounded yields a Powder of a golden Colour. In Consequence of its bitter Taste, it is called the *Gall of Nature*, and also resembles the Bile in this, that when it is dissolved in Water, it becomes viscid, and always

ways tinges the Feces with a yellow Colour. But according to *Boerhaave* it loses the Bitterness after it has undergone Fermentation. Aloes consists of two Substances, one refinous which may be extracted by Spirit of Wine, and the other of a gummy Nature, which may be dissolved in Water. The purer Aloes is, the more of a gummy Portion it contains, whereas the more impure it is, the more refinous Parts it contains. The Caballine-aloes is, also, contaminated by a large Quantity of terrestrial Matter. In Consequence of this Combination of a gummy and refinous Substance, Aloes has experimentally been found not only absterfivè and ecoprotic, when exhibited in a small Dose, but also attenuating and resolvent, and consequently aperient, emmenagogue, ecboic, and calculated for provoking the hemorrhoidal Discharge, whether exhibited internally, or applied to the Anus. It is, also, of a balsamic Quality, and resists Putrefaction. Aloes operates by resolving, in Consequence of its saponaceous Virtue, and by stimulating in Consequence of its heating Nature. When, therefore, pituitous Humours are to be expelled, Aloes prove an highly powerful and efficacious Medicine. Hence it is above all Things beneficial in Disorders of the *primæ viæ*, for which Reason it is by Way of Eminence stiled the *Soul of the Stomach*, since by its balsamic, corroborative, and laxative Virtues, it absterges and eliminates the viscid Humours; corrects such as are acid and rapid; and by corroborating the relaxed Tone of the Stomach, removes the Spasms and Flatulences of the *Primæ viæ*. Aloes has constantly been accounted one of the most considerable of the purgative Medicines. But the Dose ought at most to be no more than half a Scruple, since it always pro-

duces better Effects in small, than in large Quantities. Hence we justly infer, that the Ancients were in the wrong for prescribing a Scruple and more of this Medicine, since by this Means it excites too violent Com-motions in the Humours, as is observed by *Simon Pauli. Quadr. Bot. Eph. Nat. Curios. Dec. 2. An. 5. Obs. 218. Lemery Chym. Stahl ad Harv.* Aloes is an Ingredient in almost all the laxative Compositions, and most celebrated Pills of the Ancients. We are by no Means to exhibit Aloes, to Persons whose Vessels are tender or putrified, since it is only proper for those of moist, cold, and mucous Constitutions, and such are disposed to the Generation of Acids. Hence it is not to be recommended to old Persons, unless they are of dry Constitutions, because it is remarkably heating and drying; for which Reason it is less friendly to Persons of a dry, than to those of a moist Constitution. In *Alta Hass-niensiæ, Tom. 2. Obs. 64.* we are told, that a Discharge of bloody Urine, was produced by an immoderate Use of Aloes. Aloes, also, generally procures an hemorrhoidal Discharge whilst by its acrid Resin it stimulates the Veins of the Anus, and excites an Orgasm and Commotion in the Blood. *Hoffman* informs us, that by an excessive Use of Aloes, *Calvin* was seized with ulcerous Hemorrhoids, and a Spitting of Blood. Too much, therefore, was attributed to Aloes, by the Authors of that Maxim, *Qui vult Vivere Annos NOE, sumat Pilulas de ALOE*, the Man who wants to live as long as *NOAH*, ought to use Pills of ALOES. In the *Ephimerides Nat. Curios. Decad. 2. An. 5. Obs. 218.* we are told, that Aloes is Poison to a great many brute Animals, as well as some other bitter Substances. In Consequence of its balsamic abstergent and anti-septic Qualities, it is ex-ternally

ternally used for the Cure of Wounds, extracted with Spirit of Wine in the Form of a Tincture, to which is generally added a due Quantity of the Tincture of Myrrh and Amber. 'Tis certain that its balsamic Virtue is so great, that Animalcules may be preserved in it for Ages, upon which Account it is used in embalming human Bodies. It is good against Worms, both internally and externally, so that anthelminthic Pills and Plainers are prepared of it. As it has been observed that the purgative and resolvent Quality of Aloes is lodged principally in its gummy Part, and its balsamic Virtues in its resinous Principle, hence 'tis obvious, that the lucid succotrine Aloes is most proper for purging internally, whereas the hepatic Aloes is best accommodated for external, and surgical Purposes. Hence if the purgative Quality of Aloes is desired alone, it must be dissolved, and the filtrated Solution, evaporated to the Confidence of an Extract, which is called *prepared or washed Aloes*.

The *Barbadoes Aloes* is by some said to be procured from the *Aloe*, Offic. *Aloe Vulgaris*, *sive sempervivum Marinum*, Ger. Emac. The Horse-aloes from the *Aloe Guineensis Caballina*, *vulgaris Similis sed tota Maculata*. Commel. Prælud. Bot. And the succotrine Aloes from the *Aloe Succotrina*, Offic. *Aloe Succotrina Angustifolia Spinosa Flore Purpureo*, Breyn. Prod.

An Extract and a Refin are ordered to be made from Aloes in the New Dispensatory; and it is an Ingredient in the *Extractum Catharticum*. The *Vinum Aloeticum Alcalinum*. The *Tinctura Sacra*. The *Balsamum Traumaticum*, *Elixir Aloes*, *Hiera Picra*, Pil. *Aromat. Pil. e Colocynthide cum Aloe*, and the *Pil. Rufi*.

Alsine, Offic. *Alsine minor*, Park. Theat. *Alsine Media*, Boerh. Ind.

A. Alsine minor sive media, Ger. Emac. Chickweed. It grows in watery Places, by the Sides of Hedges and Paths. The Herb is in Use: It refrigerates and moistens, and has the Virtues of Pellitory of the Wall, only it has no Astringency. It is reckoned nutritive, and therefore a wholesome Food for Persons in an Atrophy or Phthisis. It is of an herby Taste, a little saltish, its Salt resembles the Sal-ammoniac, the distilled Water of Chickweed, or the Infusion of it in Wine, restores those who are emaciated, after long Diseases. Schröder commends it for the Phthisic. It is good for Convulsions in Children, and they give a Dram of its Root for the Epilepsy. Its Powder being laid on the Piles, stops their immoderate Flux, and assuages the Pain. Its Juice is vulnerary and deterfive, good to cleanse the Mouth, and take away Inflammations. This Herb put into an Omelette instead of Parsley is good for Spitting of Blood. Applied to the Breasts, it dissolves curdled Milk.

Althæa. This is the *Althæa Bismalva*, *Ibiscus*, Offic. *Althæa Dioscoridis & Plinii*, C. B. Boerh. Ind. Alt. *Althæa Vulgaris*, Park. Marsh-mallows. It grows in Salt Marshes and maritime Places, flowering in the Months of July and August, producing Seeds in September and October. The whole Plant contains a Juice, which is glutinous, highly soft, free from all Acrimony, and proper where there is an excessive Exsiccation, Rigidity, or Contraction of the Fibres; or where there is an Acrimony, or too violent a Motion of the Blood. We use the Leaves or Herb, which is one of the five emollient Herbs, the Flowers, the Seeds, and most frequently the Root, because it is more mucilaginous than the other Parts. These are all used both internally and externally,

ternally, in Decoctions, Clysters, Balfams, Fomentations, Cataplasms, Ointments, and Plaisters, whenever the Intention is to mollify, mitigate, and allay. In preparing Decoctions for internal Use, the Marsh-mallows is to be added towards the End, least they should become too thick and glutinous. The Plant is most commended in violent Disorders of the Breast and Kidneys, as in an Heat and Retention of Urine, and nephritic Colics. It is also an Ingredient, in pectoral Troches. *Hippocrates*, "ordered those who
"were wounded or afflicted with
"Thirst in Consequence of a Defect of Blood, to drink the Juice
"of boiled Marsh-mallows, and the
"Plant itself to be applied with
"Honey and Refin to Contusions,
"Luxations, and Tumors, whether
"in the Joints, or in muscular, or
"nervous Parts. He also ordered
"asthmatic and dysenteric Patients
"to drink this Plant in Wine." The Root of this Plant is also prescribed to be chewed in the difficult Dentition of Infants. It is also used for rubbing the Teeth, in order to cleanse them, but in order to disguise it, it is tinged with a red Colour, by boiling it with red Sanders and Alum, or with red Wine. Sometimes the Mucilage of the Roots and Seeds is used; for which Purpose these two Parts of the Plant are macerated in Water to become glutinous, then the Mucilage is expressed thro' a linnen Cloth, and has a proper Quantity of Sugar mixed with it. The external Use of this Preparation, is highly efficacious in Fissures of the Nipples, and Womens Breasts, and all other Excoriations. *Tournefort* is of Opinion, that the small Ulcers appearing on the *Penis* of Men labouring under the Stone after the Application of the Root of this Plant bruised and

boiled in Simple Water, is not owing to the acrimonious, but rather to the emollient Nature of Marsh-mallows, by which Means an Afflux of the acrid Humours is procured to the relaxed Parts. It is used in the *Syrupus ex Althæa*, *Pulvis Tragacanthi compositus*, and the *Oleum à Mucilagibus*.

There is also another Sort of *Althæa* distinguished thus, *Althæa Theophrasti, flore luteo*, *Abutilon Avicennæ*, Yellow-Mallow. This is an annual Plant, and possesses the Virtues of the common Mallow.

Alypum, Offic. *Globularia fructifera Myrti folio tridentato*, Tourn. Inf. 467. Herb Terrible. It grows on Hills flowering in the Spring; the Herb is used, and is said to be a violent Purgative. According to *Clusius* the Decoction has been given with good Success in the Venereal Disease.

Alyssum, Madwort. There is one Sort of *Alyssum* mentioned by *Dioscorides*, another by *Pliny*, and a third by *Galen*. That of *Galen* is by *Dale*, thought to be the *Marrubium album, foliis profunde incis, flore caeruleo* of *Morison*, of which *Galen* informs us, that the Dose to a Person bit by a mad Dog, is the twelfth Part of a Pint in a Quarter of a Pint of Water and Mulsim, for forty Days together, from the first Day. The same Author asserts, that it is of a moderately drying and digestive Quality, and somewhat astringent, for which Reason it clears the Skin from the Vitiligo and Sunburns.

The *Alyssum* of *Pliny*, *Dale* takes to be the *Mollugo vulgator* of *Parkinson* or Bastard Madder. This according to *Pliny*, prevents the Madness arising from the Bite of a mad Dog, if it is drank in Vinegar, and a Portion of it bound about the Part affected.

The *Alyssum* of *Dioscorides* according to *Dale* is the *Alyssum incanum Serpilli Folio Minus*; *Thlaspi alysson dictum Campestre minus*, C. B. or lesser Madwort. The Decoction of this drank, is by *Dioscorides* said to cure those Hiccups which are not accompanied with a Fever. It has the same Effect if held in the Hand or smelled to; bruised with Honey it cures Freckles and Sun-burning. When pounded and eaten with Food, it is thought to cure the Bite of a mad Dog.

There is also an *Alyssum* distinguished thus. *Alysson vulgare, Polygoni folio, caule Nudo*, T. 217. *Bursa Pastoris Minor loculo oblonga*, C. B. Pin. This and the *Alysson vulgare, Polygoni folio, loculo rotundo* are known by the Name of Whitlow-grafs, and are possessed of the same Virtues with Scurvy-grafs, and Water-cresses.

There is another *Alysum* thus distinguished, *Alysson Segetum, foliis auriculatis acutis, Myagrum Sativum*, C. B. Pin. Corn Madwort with auriculated sharp pointed Leaves; and another thus, *Alysson Segetum foliis auriculatis acutis fructu majori*, Corn Madwort with auriculated sharp pointed Leaves and a larger Fruit. These two last are called the German Sefamums, and the Myagra of the Shops. Bruised and drank to the Weight of three Ounces, they are sudorific and stomachic, and an excellent Remedy against cold Disorders.

Alysson montanum incanum luteum Serpilli folio majus, Thlaspi montanum luteum Serpilli folio majus, C. B. Pin. This according to *Lemery* is esteemed aperient and good against the Bite of a mad Dog. There are various other Species of the *Alysum* mentioned by *Boerhaave*, all of which are endowed with a very subtil penetrating and diaphoretic Virtue by which they expel Poison.

Amaranthus flos Amoris, Offic. *Amaranthus maximus*, Boerh. Ind. A. Flower gentle. It is cultivated in Gardens, and flowers in August. The Flowers only are used, which both cool and dry; they are moderately astringent, and therefore used in all Fluxions, Spitting of Blood, Diarrhæas, Dysenteries, and Uterine Fluxes.

Ambrosia, Offic. *Ambrosia hortensis*, Park. Oak of Cappadocia. With us it is cultivated in Gardens. The Herb is used, which is esteemed of a repressing and repellent Quality. *Galen* says it is astringent. The Plant is of a most agreeable Scent, and abounds with heating and aromatic Virtues, and is therefore classed among the Cardiacs and Cephalics.

Ammi, Bishops-weed. Of this there are two Species, the antient and the modern, the latter of which is thus distinguish'd, *Ammi Vulgare*, Offic. Ger. Raii Hist. *Ammi Majus*, C. B. Pin. Boerh. Ind. Alt. Common Bishops-weed This Plant is cultivated in Gardens, flowers in June, and July, and decays after it has perfected its Seed, which is the only Part of the Plant in Use. The Seeds are of a drying warming Nature, and consequently good to expel Wind and prevent the Colic. They are also diuretic and excite a menstrual Discharge.

The *Ammi* of *Dioscorides*, or that of the Antients is thus distinguished, *Ammi verum*, Offic. *Ammi Creticum*, Ger. *Ammi alterum semine apii*, C. B. Pin. True Bishops-weed, by some called the Ethiopian Cummin, but the Seed of this Herb, is much less than Cummin-seed, and of the Taste of Origanum. The Seeds of this Plant come from *Alexandria*, and *Crete*, they are of an aromatic, heating Nature, and are greatly extolled against Difficulties of Urine, and the Bites of venomous Animals; for which Reason

son it is they are an Ingredient in the *Theriaca*; they are, also, recommended for exciting the menstrual Discharge, but especially for removing Sterility in Women, and curing the *Fluor albus*. *Dioscorides* in *Lib. 3. Cap. 70.* informs us, that if mixed with Veficatories of *Cantharides*, these Seeds prevent the Strangury generally excited on such Occasions, and that applied with Honey, they take off the livid Marks of Blows on the Face.

Amomum. According to the learned *Salmasius*, there is so great a Variety of Opinions with Respect to this, that 'tis hardly possible for a Man to fix his Judgment; since *Pliny* affirms that *Amomum* is extremely brittle and friable, whereas *Dioscorides* asserts, that it is soft to the Touch. The former gives it the Leaves of the Pomegranate Tree, and the latter those of Briony. So that amidst so great Uncertainty, we shall not pretend to Infallibility, but give the most approved Accounts of the two Species of *Amomum* most in Use. The first of these then is thus distinguished, *Amomum*, Offic. *Amomum verum*, Raii Hist. *Amomum genuinum*, Park. Theat. *Amomum Racemosum*, C. B. Pin. True *Amomum*. The Tree on which this grows, and which is called the *Amomum-tree*, has Leaves which are long, strait, and of a pale green Colour. Its Flowers resemble those of the white Stock Gilly-flower. Its Fruit is pretty like the Muscadine Grape in Colour, Bulk and Shape; but is not so full of Grains, and is less juicy. Its Pods, which have no Pedicles, are crowded together, and glued as it were, on a long Nerve, which they surround to the very Top, and which serves as a Support to them. In the inner Side of these Pods, are found purple coloured Grains of an almost square Fi-

gure, distinct and covered with slender white Membranes. The Taste of these Grains is sharp and acrid, whilst their Smell is extremely penetrating and aromatic. The newest *Amomum* is always best, and ought to have its Pods round, of a whitish flaxen Colour, whereas that whose Pods are black or shriveled, is little or not at all esteemed. The Fruit of this Tree, is an Ingredient in the *Theriaca*, and is sometimes mixed with strong Purgatives, in order to qualify and mitigate them. It is also accounted carminative, alexipharmic, and stomachic. According to *Lemery*, it is inciding, digestive, resists Poisons, disperses Wind, strengthens the Stomach, creates Appetite and Strength, and provokes the Menfes.

Another *Amomum* is thus distinguished, *Amomum*, Offic. *Sison*, Mor. *Sison sive Officinarum Amomum*, Raii Hist. *Sison quod Amomum Officinis Nostris*, C. B. Pin. Boer. Ind. Alt. Bastard Stone Parsley. It grows in Ditches, Banks, and moist Places, flowers in Summer, and in August bears ripe Seeds, which are the only Parts of it used. These Seeds are hot, dry, attenuating and good for removing Obstructions and cleansing the Kidneys from Gravel. They are also diuretic, emmenagogue, and alexipharmic, for which last Quality they are sometimes put into the *Theriaca Andromachi*, as a Succedaneum to the true *Amomum*.

Amoris Pomum, Offic. Ger. *Pomum majus amoris fructu Rubro*, Park. *Solanum Pomiferum fructu rotundo. Striato Molli*, C. B. Pin. Raii Hist. *Lycopersicon Galeni*. Boerhaav. Ind. Alt. Love Apples. It is sown in Gardens, and flowers in July. The Fruit is ripe in September, and perishes with the first Frosts. In Italy the Love Apples are eaten with Oil and Vinegar as Cucumbers are in England. They are sometimes used ex-

ternally in cooling and moistening Applications for Inflammations and an Erysipelas. The Juice is by some greatly commended in hot Defluxions of Rheum upon the Eyes. But in general it is so little used, that it deserves no further Notice to be taken of its Distinctions and Virtues.

Amygdalus amara & *dulcis*, Offic. J. B. *Amygdalus sativa*, C. B. Raii. Hist. *Amygdalus sativa*, *fructu majore*, Boerhaav. Ind. Alt. The Almond-tree. They grow spontaneously in the warmer Climates, as *Spain*, *Barbary*, *Italy*, and *France*; they flower early in the Spring, and the Fruit is ripe in *August*. Sometimes Trees which before bore Sweet Almonds, begin to bear those of the bitter Kind, whilst those last often bear Sweet Almonds, if transplanted into a better Soil, or cultivated with more Care. Bitter Almonds, prove mortal to many Animals, Quadrupeds, and Birds. In Storks, Doves, Cats, and Dogs, they excite Convulsions, as is obvious from the Experiments recounted in *Wepfer de Cicut. Aquat. Bonet. Sepulchr. Anatom. and Eph. Nat. Curios. Dec. 3. An. 1. Obs. 156*. But to Mankind they afford a proper Medicine on many Occasions, tho' they are rarely eaten on Account of their Bitterness. They are of a stimulating detergent, aperient, and diuretic Quality. *Hoffman ad Poter.* speaks of them in the following Manner: "I cannot sufficiently recommend the Use of bitter Almonds, for preventing the Generation of the Stone, if three or four of them are eaten every Morning. It is hardly credible how beneficial they are in calculous Dispositions, since they expel the Urine, and eliminate the Sand, which is the Element of the Stone, as I have found from frequent Experience." Many recommend them before drinking, in order to

prevent Intoxication, after the Example of the Emperor *Claudius Simion Serbi* tells us, "that in Consequence of their attenuating Quality, they are proper for removing Obstructions of the Liver and Spleen, and dissolve Stones of the Bladder and Kidneys. It is also said, that if a Person eats them fasting, he will not be drunk that Day." But this last Assertion is by *Brown* in his *Vulgar Errors* shewn to be false. Oil of Bitter Almonds expels the Urine, because it opens the Passages and relaxes the spasmodically constricted Parts, for which Reason it is also accounted a carminative Medicine, whether taken by the Mouth or injected by the Anus. It operates more powerfully than Oil of Sweet Almonds, because it is of a more penetrating Quality. Hence *Schulzsius in Praelect.* tells us, that "it is resolvent and discutient. It is dropt into the Ears of those afflicted with a ringing and humming Noise. It is also applied to the Pubes in Retentions of Urine, with Lilly Roots, and Honey; it is commended for removing Freckles and Asperities of the Skin." In the Disorders of the Ears, it proves effectual, if they proceed from impacted Sordes, which generally happen to those who remain long in the Cold, and among Dust. But we are by no Means to use it in too large a Quantity, lest by that Means, the *Tympanum* should be preternaturally relaxed, which greatly injures the Hearing; for which Reason some mix with it a small Quantity of Spirit of Wine, in order to diminish its relaxing Quality. *Dioscorides* tells us, of the Gum of the Tree, "that it is heating and astringent; beneficial to those who vomit Blood, if drank in a proper Liquor; and fit for removing an Impetigo, if used as an Ointment with Vinegar. It also cures an inveterate

" inveterate Cough, if drank in weak Wine." The judicious *Hoffman* tells us, " that the Gum is astringent, so that it is hardly probable that it can break the Stone, tho' it may, like Gum-arabic, so incrustate the pain'd Parts, as that they may not feel the Force of the Gravel or Sand. By the same Means also it affords Relief in saline Defluxions. It also restores the Tone of the Kidneys." Bitter Almonds are much used as a Cosmetic, in order to beautify the Hands, and render them white. An Oil of Bitter Almonds is directed in the last College Dispensatory.

Sweet Almonds if recent, are of a grateful Taste, especially if macerated in Water, and freed from the Membrane which covers them. They abound with an oleous Juice, are nutritive, and fit for making Emulsions. The Oil of recent Sweet Almonds, is highly temperate, and proper both internally and externally, in all Cases where Acrimony is to be corrected, Rigidity softened, or Stricture relaxed. Hence they are with great Advantage prescribed in Emulsions for emaciated, hectic, and pleuritic Patients. The unripe Fruit before the Shells are hard, if boiled in Water, and prescribed in Sugar, rouse and restore the Strength of sick Persons. The expressed Oil of Sweet Almonds is an excellent Ingredient in lenitive and emollient Liniments, and Ointments. It is, also, highly beneficial for internal Purposes; for as we are informed by *Hoffman in Tr. de Remed. Domest.* If any one has swallowed an acrid caustic Poison, it so lubricates the Stomach, as to prevent the Effects of the Poison, if it is taken immediately after. It is, also, an excellent Antispasmodic and Sedative, if exhibited to those afflicted with griping Fluxes. In Hoarseness, Coughs, Asthmas, Phthisics, and all Disorders of the

Breast, it is highly beneficial; especially if mixed with Sperma Ceti, and Sugar Candy. A few Spoonfuls of this Oil, exhibited in Broth prepared with Flesh, are highly serviceable in spasmodic Colics, in violent gravel Pains, and in those Gripes, which generally accompany a Suppression of the *Lochia*. An Oil is ordered to be expressed from Sweet Almonds, which is a principal Ingredient in the *Sapo Amygdalinus* of the New Dispensatory. That Oil of Almonds is best which is white, pellucid, and expressed a little before it is used. Some Authors assert, that Oil of Bitter Almonds keeps longer free from Corruption, than that of the sweet Kind. Sweet Almonds are a principal Ingredient in the *Emulso Communis*.

Amylum. Starch. This is a Drug well known to every one, on Account, of its domestic Uses. It is made of Wheat macerated in Water, till it is soft, and then the white Pulp is pressed out, and dry'd. *Dioscorides* says it is good for Rheums of the Eyes, hollow Ulcers, and Pustules; that it stops Vomiting of Blood, and mollifies the Parts about the *Aspera Arteria*, taken in Milk, or with other Food. *Oribasius* recommends a forbile Liquor, that is a Decoction of Starch in Water, in a Fever attended with a *Diarrhœa*; he farther says it is excellent in a Dysentery, taken either in Milk, Water, or alone. And I believe Experience confirms what he advances. *Clutton*, in a Treatise on Fevers, lays great Stress on a Solution of Starch, given by way of Clyster, in a *Diarrhœa*, accompanied with a Fever, or without one; and advises to make the Confection of Starch very thick, and to add to four Ounces of this, one of French Brandy. In boiling, *Oribasius* directs ten Drams of Starch, in four Pints of Water.

Anacardium, Offic. Ger. *Arbor Indica fructu conoide, cortice pulvinato, nucleum unicum, nullo officulo tectum claudente*, Raii Hist. The *Anacardium* or Malacca Bean-tree. The oriental *Anacardium* is a Seed growing at the Top of a conical East India Fruit. It is in Shape and Colour like a Bird's Heart, covered with a tough Skin including a spongy Substance, full of an hot caustic Oil underneath, in which inclosed in another Skin lies the Kernel, which tastes like an Almond. *Matthiæus ad Dioscorid.* & *Boerhaave in Instit. Med.* reckon *Anacardiums* among the Class of Poisons, which are manifestly acrid. Others account them highly beneficial to the Brain and Memory. Some call the Confection of *Anacardiums* the *Confection of Wise Men*. But others, with better Reason, think that it ought to be call'd the Confection of Fools, because the Use of it brings on Madness; as we are informed by *Schulzius in Prælect.* The inspissated Juice of *Anacardiums* is recommended externally for dissipating hard Tumors. Some also order it to be exhibited internally, for cold and moist Disorders of the Brain. But all the Preparations of *Anacardiums*, are justly now disused in the Shops, because they are unsafe.

There is also an occidental *Anacardium* thus distinguished, *Anacardium occidentale* Jons Dendr. *Acajou*. Boerh. Ind. Alt. The Cajou or Cassu-tree. This in Form and Bulk resembles a Hare's Kidney; the Out-side is covered with a tough ash-coloured Bark. It contains a large Quantity of caustic burning Oil, and under that in a soft Shell, a white pleasant Kernel. The caustic Oil is good for curing Warts and Corns. The Fruit is said to be proper for removing Freckles and Sun-burn from the Face, but Women ought not to use it during Menstruation,

because at that Time it often produces an Erysipelas, which however may be removed by a Wash prepared of Brandy and Water.

Anagallis. There are three Species of this Plant used in Medicine. The *Anagallis mas, fœmina*, and *aquatica*. The first of these is thus distinguished, *Anagallis terrestris mas*, Offic. *Anagallis mas*, Raii Hist. *Anagallis flore Phœniceo*, C. B. Pin. Boerhaave Ind. Alt. Male Pimpernel. It flowers in May and June, and is to be found in Corn Fields.

The second is the *Anagallis terrestris fœmina*, Offic. *Anagallis fœmina*, Raii Synop. *Anagallis cœruleo flore*, Boerhaav. Ind. Alt. Female Pimpernel. The Virtues of both these Species are nearly the same. The whole of this Plant is greatly celebrated; for a Decoction of it drank, is not only commended against the Plague, the Bites of a Viper, and mad Dog, but has also been found a Specific in Madness, after the previous Exhibition of an Emetic. When boiled to a Cataplasm with Urine, it is said to afford great Relief in the Gout. It is, also, asserted, that it is beneficial in stopping Hemorrhages of all Kinds; thus 'tis said to stop immoderate Fluxes of the Menfes, when suspended on the Pit of the Stomach, and to stop the Discharge of Blood from a Vein, if held in the Hand till it becomes warm. The Herb is acrid, and acts by stimulating the Vessels and resolving the Humours, like a true Soap possessed of a subastringent Quality. Hence its Juice is proper where the Purposes of Absterfion are to be pursued, in the Scurvy, and atrabiliarious Disorders; so that if it cures Maniacs, it produces its Effect by resolving and fusing the thick and viscid Humours. If it is be-

neficial

neficial againſt the Plague, and the Bites of venomous Animals, it muſt be on Account of its reſolvent and abſtergent Qualities. Hence the Reaſon is obvious, why its Decoction, or expreſſed Juice, with Honey, are beneficial in removing Dimneſs of the Sight, becauſe it is reſolvent, aperient, and procures free Paſſages to the ſtagnant Humour, if it is not too deeply impacted, in which Caſe more powerful Remedies are hardly of any Efficacy. The Decoction of the Plant is recommended for provoking the Menſes, becauſe it is of a reſolvent Quality.

The third Species is the *Anagallis aquatica*, *Becabunga*, Offic. *Anagallis aquatica minor*, folio, ſubrotundo, C. B. Pin. *Veronica aquatica major*, folio ſubrotundo, Boerh. Ind. Alt. Brook-lime. It grows in Rills, and Ditches of running Water, flowers in June, and retains the Leaves all Winter. The whole Plant is uſed; and is a good deobſtruent and antiſcorbutic, abounding with volatile Parts; very good for the Scurvy, and therefore uſed as an Ingredient in the antiſcorbutic Juices and Diet-drinks. It is alſo deterſive, cleaning, and uſeful in Obſtructions of the Kidneys, by Gravel or ſlimy Humours, as alſo for the Stone and Dropſy.

Anagyris, Offic. *Anagyris fatida*, Ger. Boerh. Ind. A. Stinking Bean Trefoil. This is a Shrub which grows in warm Countries, the Leaves of which are ſaid to be reſolutive, and the Seeds emetic.

Ananas. The Pine Apple. This Fruit is now pretty commonly known, being much cultivated in the Gardens of the Curious, at a conſiderable Expence. It grows ſpontaneouſly in the warmer Parts of the *East* and *West Indies*, and is a moſt delicious Fruit. It is eſteemed cordial, and analeptic;

and is ſaid to raiſe and exhilarate the Spirits, to cure a Nauſea, and provoke Urine. But 'tis ſubject to cauſe a Miſcarriage, for which Reaſon Women with Child ſhould abſtain from it.

Anchuſa. There are various Species of this Plant, mentioned by Botaniſts, but the moſt conſiderable is that thus diſtinguiſhed, *Anchuſa*, Offic. Chab. *Anchuſa puniceis floribus*, C. B. Pin. Boerh. Ind. Alt. *Bugloſſum perenne minus*, *puniceis floribus*, Hiſt. Oxon. *Alkanet*. This Plant grows ſpontaneouſly in *Languedock*, *Italy*, and *Spain*. It is alſo found in the warmer Parts of *Germany*, but the beſt is that of *Conſtantinople*, from whence its Roots are brought, almoſt as thick and as long as a Perſon's Arm, compoſed as it were of long, broad, and contorted Leaves, of an obſcure red Colour, intermixed with a little Violet and White. The Root was formerly more uſed than at preſent, eſpecially in Decoctions, where Aſtringents were judged proper in Diarrhoeas and Hemorrhages, and externally to dry Wounds. When infuſed in Petroleum, it is recommended by Ray in *Hiſt. Plant.* to be uſed by Way of Ointment in recent Wounds and Punctures. It is more frequently uſed by Dyers, and was in early Times employed by the Inhabitants of the Eaſtern Countries, to tinge the Nails with a red Colour, as is obvious from the Nails of the Mummies which are always red, as we are informed in *Eph. Nat. Curioſ. Decad. 2. An. 6.* In *Spain* it is ſtill uſed for painting the Face, and tinging Wax and Oil. Apothecaries uſe it to colour their Ointments, but for this Purpoſe it muſt be boiled in Oil; becauſe it does not readily give a Tincture to Water.

Androſace annua, ſpuria, Ger. *Androſace vulgaris latifolia*, annua, Boerh.

Boerh. Ind. Alt. Summer Navel Wort. It grows in maritime Places, amongst Corn, and in Woods, and is esteemed aperitive, good for Retention of the Urine, for the Dropsy, and Gout.

Androsæmum, Offic. *Androsæmum maximum frutescens*, Boer. Ind. Alt. Tutian, or Park Leaves. It grows in Hedges and Thickets, and flowers in July and August. The Flowers, Leaves, and Seeds are used, which agree in Virtues with those of the *Hypericum*, being vulnerary, and resolvent, both internally and externally used.

Anemone. Of this Plant there are two Species used in Medicine. The *Anemone Hortensis*, Offic. Garden Anemone. And the *Anemone Sylvæstris*, Offic. Wild Anemone. Both are esteemed deterfive, inciding, vulnerary, and drying, but are too acrimonious for internal Use, and therefore only employed externally.

Anemonoides Flore albo, Boerh. Ind. Alt. *Anemone Nemorum alba*, Ger. Wood Anemone. This Plant is hot acrimonious, and will raise Blisters on the Skin.

Anethum, Offic. Ger. Raii. Hist. *Anethum hortense*, C.B. Pin. Boerh. Ind. A. Dill. It is sown in Gardens, and if permitted, renews itself annually by the Seeds which fall from it. *Hippocrates*, in lib. 2. de *Diæta* informs us, "that Dill is hot, produces Costiveness, and when smelled to, stops Sneezing." The Moderns affirm, that Dill is possessed of a somniferous Quality, for which Reason this Plant is often suspended in the Beds of those who cannot sleep. With some 'tis also customary to place a Decoction of Dill, in the Beds of sick Persons, after they are closely covered with Canopies, or enclosed with Curtains, as we are informed by *Simon Pauli* in *Quadrupartit. Botan.* *Brayer* in lib. 8. c. 29.

informs us, that the Ancients in their Feasts, used to crown themselves with Dill in order to procure Sleep. This Plant is of an aromatic, volatile, and vaporous Nature, for which Reason, when smelled to for a considerable Time, its Exhalations may fill the Head, and induce Sleep, as is also observed of Saffron, in which, however, this Quality is stronger. That the Steam of its Decoction should promote Sleep, is by no Means surprising; since the Steam of Water alone removes the Causes of Watching, such as excessive Dryness, Acrimony, and an accelerated Motion of the Fluids, arising from a Stricture of the Solids, as we are informed by *Boerhaave* in *Institut. Med.* As Dill is possessed of an aromatic Quality, it will stimulate the Solids, and consequently rouse the Stomach, which when corroborated will digest the Aliments better. Hence arises the greater Quantity of Chyle, and consequently an Increase of Milk in Nurfes. The common People are sufficiently acquainted with this Virtue of Dill; since they mix it with the Food of Cows, in order to increase their Milk. Dill is, perhaps, better against Flatulences than most other Aromatics; because its Acrimony is tempered by a large Admixture of an oleous Principle. For this Reason it is a laudable Custom to pickle Cucumbers with the Umbels or Tops of Dill. Since, therefore, Dill is of an aromatic heating, corroborating, discutient, and consequently resolvent Quality, the Reason is obvious why a Decoction of it is useful for exciting Urine and removing the Strangury, and Dysentery; especially when proceeding from Coldness and Relaxation. Hence we find a Decoction of Dill in a sufficient Quantity of Water and Oil, greatly recommended against the Iliac Passion, arising from

from an Induration of the Feces. It is easy to conceive, that an Hiccup arising from a cold Cause, may be suppressed by smelling Dill. Whatever Effects the Plant performs, when reduced to Ashes, are owing to the Acrimony of these Ashes. But the Ashes of the Roots, are more acrid than those of the Seeds; because the former have a smaller Quantity of Oil mixed with them. The excessive Use of it is said to procure Sterility, and render the Sight dull, which Effects it produces by heating and drying, as all other hot Substances do. The Herb or its Tops, are at present most frequently used in Clysters against flatulent Colics, but rarely in Decoctions for internal Use. The Seeds are preferable to the Tops, because the former are more aromatic, and may be kept for three Years, tho' they are the better to be renewed every Year. The Root is not at present prescribed. In *Ephemer. Nat. Curios. Decad. 2. An. 1. Obs. 146.* we have an Account of the surprising antaphrodisiac Effect of Dill Water; for a certain Man after a Fall, finding his Arm seized with a Kind of Atrophy, washed it frequently with this Water, from which he perceived considerable Relief; but at the same Time observed Impotency brought on, which was not removed till he desisted from the Use of the Water. Oil of Dill is mixed with Ointments and Plasters, of an emollient, discutient, and resolvent Nature. It is, also, added to emollient and carminative Clysters, and is properly used as an Ointment for the Temples, in a Cephalalgia, and in order to procure Sleep. *Simeon Sethi* informs us, "that it alleviates Inflammations," "procures Sleep, and maturates" "crude Humours; when used as" "an Ointment, it also, discusses

"Flatulences of the Abdomen, and" "proves beneficial to those who" "are fatigued with hard Labour," "but some affirm, that it is inju-" "rious to the Kidneys." The Oil obtained from the Seeds, is an excellent Remedy, especially in *Eleosaccharums*, against Flatulences of the Stomach. An essential Oil is directed by the College, to be drawn from the Seeds; and a Water.

Angelica. Botanists enumerate various Species of this Plant, but that most used in Medicine is thus distinguished, *Angelica, Offic. Angelica Sativa*, C. B. Pin. Raii Hist. Boerh. Ind. Alt. *Angelica*. It flowers and produces Seeds in June and July, the Root perishing after the ripening of the Seeds, which is the second Year. This is a Plant of an highly penetrating and aromatic Nature; its Seeds and Roots are in a particular Manner resolvent and stimulating, and consequently sudorific, alexipharmic, and proper to expel the pestilential Poison by Sweat. The Root is thought best, which when chewed, has the Taste and Smell of Ambergrease and Musk mixed together, and spreads a Kind of penetrating Gratefulness all over the Mouth, without exciting any Inflammation. Hence an Infusion or a gentle Decoction of it, is commended against a fetid Breath, and when used in the same Manner, it is said to be beneficial in Coughs arising from Cold, or a viscid Mucus; because it renders Respiration more free and easy. From what has been said we may know, why the whole Plant is classed among the carminative Medicines, and for what Reason some recommend a Drain of its dried Powder, taken with Wine, or Rob of Elder, in intermittent Fevers. In Medicine the Root is more frequently used than the Seeds, whilst the Leaves are entirely neglected.

glected. According to *Valent. Mus.* Wormwood keeps the recent Root free from Rottenness. The Root macerated in Vinegar, is in the Plague reckoned a great Preservative by many, who keep a Piece of it in their Mouths, when they go to visit the Infected. The Root and Stalks preserved answer the same Intention, and a Confection of the Seeds is highly proper for those who would guard against the Injuries of a malignant Air. The Water distilled from the Roots and Seeds of Angelica, contains the volatile Parts of the Plant, is gently stimulating and diaphoretic, and may be properly used as a Vehicle for many Remedies. It is externally ordered against the Bites of venomous Animals, and some recommend it as an Ointment to be used by those afflicted either with the Gout, or Ischiadic Pains. *Baubine* informs us from *Dodonæus*, that the Inhabitants of some of the northern Countries, eat the Stalks after taking the Bark off them, by which Means they are rendered very grateful and well tated. The Inhabitants of *Lapland*, according to *Linneus*, chew the Roots instead of Tobacco, and use them against a violent Species of Cholic, which rages among them. It is an Ingredient in the *Aqua Alexiteria simplex*, the *Aqua Alexiteria Spirituosa*, the *Aqua Alexiteria Spirituosa cum Aceto*, and the *Aq. Sem. Anisi Composita*.

Another Species of Angelica is the *Angelica Sylvestris*, *Offic. Angelica Sylvestris major*, *Boerh. Ind. Alt.* The Virtues of this are esteemed the same as those of the former, but weaker.

A third is the *Angelica Sylvestris minor, seu erratica*. *Boerh. Ind. Alt. Herba Gerardi*, *Offic. Ger. Padagrarica vulgaris*, *Park.* It flowers in

June and July, and is much recommended for the Gout.

A fourth is the *Angelica Scandiacæ, Archangelica Tabernæmontani, quæ Umbella est flavæ, Semine rotundiore*, *Boerh. Ind. Alt.* This agrees in Virtues with the former.

Anisum, *Offic. Ger. Anisum Herbariis*, *C. B. Pin. Apium Anisum dictum, Semine Suaveolente*, *Boerh. Ind. Alt.* Anise. It flowers and bears Seeds in July, the Root dying every Year after it has yielded the Seeds. It is cultivated in Germany, but the best Seeds, which are of a smaller Size, come from Spain. Those Seeds are best, which when chewed remove a fetid Breath, and render it agreeable. On Account of their aromatic Qualities, they are used in Cases where Flatulencies are to be dissolved, and the Stomach corroborated. In Consequence also of their aromatic Nature, they are recommended as a Stimulus to Venery, as good for provoking Urine, procuring Milk to Nurses, stopping the *Fluor albus*, and Diarrhoeas arising from Relaxation and an inactive Mucus. In Disorders of the Breast arising from Refrigeration, they are proper for resolving the viscid and tenacious Matter. In purging Medicines, especially Infusions of Sena, they are used to prevent Gripes. As by Means of their aromatic Nature, they heat the Body, they are placed among the four greater hot Seeds. Hence *Pliny* was in the right when he said, they procured an Appetite. In Medicine they are used in Infusions and in Powders; many, both for the agreeable Taste, and in order to avoid too great a Relaxation of the Stomach, by the warm Water, put them into Coffee and Tea, which thus prepared, afford Relief in cold Disorders of the Breast and Stomach, to such as are not accustomed

ed to these Liquors. Powder of Aniseeds with Crab's Eyes, is very properly exhibited to Children, against a peccant Acid in the *Primæ viæ*; as also to Nurses, for the same Intention. *Heurnius in Comment. in Sect. 3. Aph. 24. Hippocrat. says,* "for Gripes in Children generally give a Scruple of Aniseeds, powdered grossly in the first Spoonful of their Pap, by which they are purged in the same Manner as Adults are by Rhubarb;" for by resolving the Mucus, and stimulating the Fibres, they expel that which being impacted in the small Intestines, had produced the Gripes and Flatulences. *Pliny* affirmed, that Anise was useless to the Stomach, except when inflated, because it would prove too hot and drying, stimulate the Fibres, and throw the Humours into Commotions. Distilled Oil of Anise, contains the most excellent Virtues of the Seeds; it is highly penetrating and proves carminative, if the Abdomen is anointed with it. In order to expel Urine, it is also applied to the Region of the Kidneys, and the Pubes. The Subtily of this Oil is obvious from this, that two Drops of it will convey the Taste and Smell of Anise, to a large Vessel full of Water. The best is that which is white, swims upon Water, and in a moderate Cold is concreted like *Sperma Ceti*, but again becomes fluid by a gentle Heat. An essential Oil is ordered to be drawn from the Seeds. It is a principal Ingredient in the *Aq. Sem. Anisi Composita*, and enters the Composition of the *Mithridate*, and *Theriaca Andromachi*.

Anonis, Ononis Arestæ, Bovis, Offic. Anonis Spinosa flore purpureo, C. B. Pin. Raii Hist. Boerhaave. Ind. Alt. Restharrow. It grows in waste Grounds and by the Road side, flowering in June and July. The

Root is one of the five smaller aperient Roots, of a penetrating Taste, and commended for its inciding, resolvent, aperient, and diuretic Virtues. The Bark of the Root according to *Simon Pauli in Quadrepart Botan.* is a powerful Medicine for dissolving the Stone in the Kidneys and Bladder. The Root is used in Decoctions, in Cases where Phlegm is to be incided, and a Discharge of Urine excited. *Scultetus* and *Matthiolum* give us Instances of Persons cured of a Sarcocoele, by the continued Use of the Powder of this Root in common Broth, together with the Application of some Topics. But neither this nor any other Remedy has hitherto been found such a Specific in these Disorders, as to prevent the Necessity of cutting, as we are informed by *Freind*: *Konigius* also observes, that the Root is not diuretic in all Patients, and in most excites Cardialgias and Disorders of the Stomach. The Root boiled in Water and Vinegar, makes a Collyrium for the Mouth, highly commended against Tooth-achs, and the exulcerated Gums of scorbutic Persons.

Anthora is thus distinguished, *Aconitum salutariferum, Boerh. Ind. A. Anthora flore luteo Aconiti; Contrayerva germanica, Napellus Moyses.* Wholesome Woofsbane. This Plant is extoll'd as an Alexipharmic, and an excellent Medicine against the Bites of venomous Animals. The Use of the Root reduced to a Powder, is by some greatly suspected, because it purges violently, and excites a Vomiting, whilst others think that it is not the worse upon this Account, since the purgative and emetic Quality of *Ipacacuana*, does not deprive it of the Title of a safe Alexipharmic. In such a Variety of Opinions, Experience is to decide who are in the right, and who

who in the wrong. Thus the judicious *Hoffman* tells us, "that if we consult Experience, we find that this Root instead of being an excellent Alexipharmic, is highly unsafe, because it contains an highly acrid, caustic, penetrating Salt, which vellicates the Tongue when tasted. — I remember a *Westphalian* Apothecary used to give the bezoardic Powder, with this Root, in a great many Cases, in most of which it excited a violent Perturbation of the Stomach accompanied with Heat, Thirst, and Anxiety of the Præcordia; for this Root contains a caustic and inflammatory Salt; so that it is an highly suspected Medicine, especially if exhibited in large Doses."

Anthyllis prior, Offic. *Medicago Vulnerariae facie hispanica*, Boerh. Ind. Alt. Sea Kidney Vetch: *Dioscorides* recommends this taken in Oxyemel in an Epilepsy.

Anthyllis Leguminosa, *Vulneraria*, Offic. *Vulneraria Rustica*, Boerh. Ind. Alt. Kidney Vetch, or Lady's Finger. *Dioscorides* says, this Herb is good in a Difficulty of Urine, and Disorders of the Kidneys. And that both Kinds bruised, and applied by Way of Pessary with Oil of Roses and Milk, assuage Inflammations of the Uterus, and are good Vulneraries.

Antirrhinum, Offic. *Antirrhinum Arvense majus*, Boerh. Ind. Alt. Snap Dragon, or Calves Snout. *Pliny* recommends this by Way of Pessary, with Honey, and Oil of Roses, in a Strangulation of the Uterus, (Hysterics) and Difficulty of Menstruation.

Aparine, Offic. Ger. *Aparine vulgaris*, Boerh. Ind. A. Cleavers, or Goose Grass. It grows in the Fields, especially about the Roots of Bushes, and Hedges. It is of a

subtile Nature, opens, expels, purifies and dries. Boiled in Water, and drank, it removes Obstructions of the Liver and Kidneys, cures the Dysentery, and is beneficial in a simple Gonorrhœa. Its Juice, depurated and mixed with white Wine, may with Success be drank for the Dropsy. Its Juice taken in Wine, cures the Bites of venomous Animals, and also Pains of the Ears when warmed and dropped into them. The Herb itself boil'd with Salt, cures Excrescences, applied to them by Way of Plaster. Reduced to Powder, it cures Wounds and Ulcers, and stops Hæmorrhages. *Tragus* recommends its distilled Water for the Jaundice and Dysentery. It is also very efficacious in Disorders of the Kidneys. It eases racking Pains of the Breast and Hypochondria.

Apium. The Species of this Plant most in Use, is thus distinguished, *Apium vulgare ingratius*, J. B. *Apium palustre sive* Offic. Rani Hist. *Apium palustre* & *apium*, Offic. C. B. Pin. Boerhaav. Ind. Alt. Smal-lage. It flowers and bears ripe Seeds in the Summer. It grows spontaneously in Italy and Spain, and delights in moist Places, Ditches, the Brinks of Rivulets, and the Sea Shore. When transplanted into Gardens, and carefully cultivated it becomes milder, more grateful, and is called Celery. *Hippocrates* in *Lib. de affectionib.* informs us, "that Smallage, both boiled and crude is diuretic, but the wild more so than the Garden kind." The Plant itself is of an highly penetrating, aromatic, and stimulating Quality, and is therefore accounted anti-scorbutic, aphrodisiac, aperient, abstergent, and diuretic. According to *Tournefort*, it contains a large Quantity of volatile oleous Salt dissolved

Solved in a great Deal of Phlegm, and united to a considerable Portion of Barth, as also an urinous Spirit, and a small Quantity of a concreted volatile Salt. The Root is one of the five great aperient Roots, and is used both in diuretic Decoctions, and in Cataplasms and Fomentations with Coriander and Vinegar, for diminishing the Quantity of Milk in the Breasts of Women. The Water distilled from the Roots, is by the common People, thought excellent against the Dropsy. The expressed Juice of the Plant, is by some greatly recommended in intermittent Fevers. The Seeds which are among the four lesser hot Seeds, have the same Virtues with the Root, but are more efficacious. Those who love Smallage, ought not to use too large Quantities of it; because it is prejudicial, especially to weak and epileptic Patients.

Aquilegia Cærulea, Ger. *Aquilegia Sylvestris*, C. B. Pin. *Aquilegia flore simplici*, J. B. Raii. Hist. Columbines. It grows spontaneously almost every where in *England*, and is cultivated in Gardens on Account of its Flowers, which it bears in *June*. The Plant is possessed of a stimulating Quality, and consequently is accounted diuretic, and emmenagogue. The Eruption of the Small Pox and Measles is greatly promoted, by half a Dram of the Seeds, either alone or with an Emulsion prepared of Elder Flower Water, or a Decoction of Figs. A Dram of the Seeds powdered with Saffron, and mixed with Wine, is thought good against the Jaundice, if the Patient waits for a Sweat in Bed. Emulsions of Columbine Seeds prepared with a Decoction of Grapes or Figs, are by some greatly extolled in malignant Disorders. The Seeds bruised and exhibited in Wine, are accounted good for difficult Labours. *Camerarius* extols the Seeds,

incrustated with Sugar, as excellent against the Cholic and Vertigo. The triturated Seeds are frequently used externally, for correcting the scorbutic Putrefaction of the Gums and curing Ulcers of the Mouth and Fauces. According to *Ray* the Leaves are often used in Collutions and Gargarisms, intended to remove hot Disorders of the Fauces, and Aspera Arteria. In *Spain*, the Inhabitants after long fasting, eat the Root, in order to expel Stones from the Kidneys. The Water distilled from the Flowers, or from the whole Plant, is said to remove Gripes, and expel Poisons. According to *Tournefort*, the Water of Columbines, is an excellent anti-scorbutic Medicine, fit for detarging Ulcers, and for rendering the Gums firm, if used as a Collution.

Areca, Offic. The Indian Nut. *Areca, five faufel*. The drunken Date Tree, Ger. *five Faufel avellana Indiana versicolor*. The discoloured small Indian Nut. This according to Mr. *Geoffroy* is the Fruit of a Species of Palm Tree produced in the *East Indies*. The outward Covering is of the Bulk and Shape of a Pullet's Egg, and consists of numerous fine Filaments, running Lengthways from the Stalk to the Head, under which is contained the Fruit or Nut, externally of a brownish Colour, shaped like a Nutmeg at one End, but flattish at the other, with a Kind of Navel towards one Side. Within it is white, and like a Nutmeg marbled with purplish Veins; but it is of very little Taste. The *Indians* chew this Nut wrapt up in a Betel-leaf, in order to assist Digestion, and strengthen the Gums, as we are informed by *Kempfer*. When fresh, it is gently astringent, and of this Fruit is made that Extract which in the Shops is called *Terra Japonica*. To this Extract they sometimes join that of another Plant,

Plant, called *Lycium*, as also calcined Shells.

Argentina, is thus distinguished, *Pentaphylloides Argenteum, alatum, seu Potentilla*, Tour. Inst. Boerh. Ind. Alt. *Potentilla anserina*, Offic. *Pentaphylloides argentina* Dicta, Raii Synop. Wild Tansey. It grows in moist and barren Places, and where Water has stood all the Winter, flowering in May. *Tournefort* informs us, that it is astringent, vulnerary and deterfive, that it is an excellent Ingredient in Ptisans and Broths for Looseness, Bloody Flux, and Hemorrhages, and that he has seen wonderful Effects produced by it in the *Fluor albus*, especially if seven or eight Craw-fish are added to each Decoction of wild Tansey; that it abates Inflammations of the Kidneys and Bladder, and temperates the Heat of the Urine; and that its distilled Water is good for Blearedness and Ulcers of the Eyes, as also for Tanning or Redness of the Face, Mr. Ray in Hist. Plant. informs us that it is an excellent Lithontriptic, and very serviceable in the Cure of Wounds and Ulcers; that externally it is much used for the Tooth-ach, putrid Gums, and allaying Heat in Fevers, for the last of which Purposes, it is to be bruised and applied to the Soles of the Feet or the Wrists; that *Agricola* found the Juice of this Herb with the Powder of common *Colchicum*, to be a Cure for the Disease of the Anus called *Mariscæ*; and that according to *Castor Durantes*, those who labour under Dysenteries, Fluxes, immoderate menstrual Evacuations, and even Hemorrhages from the Nose, are cured by wearing it in the Shoes. *Boerhaave* tells us, that it is possessed of the same Virtues with the Peruvian Bark; since if the Herb is bruised, and its Juice taken an Hour before the Paroxysm of an intermittent Fever, it removes it with one

or two Doses, if the Disorder is of the kindly Sort, but if there be any Malignity in the Fever, it is to be applied externally. Internally it is of Service in all Disorders consisting in the Openings of the Vessels, and Evacuations of the Fluids.

Arisarum, Offic. *Arisarum angustifolium, Dioscoridis forte*, Boerh. Ind. A. Friars Cowl. It grows in Italy and Dalmatia. It heats, dries, incides, absterges and digests.

Aristolochia. Birthwort. Of this there are three Kinds used in Medicine, the first of which is the *Aristolochia vera rotunda major*, Offic. *Rotunda, flore ex purpura nigro*, C.B. and *Aristolochium*, Hippocrat. Round Birth-wort. It grows in Spain, Italy, and the Southern Parts of France, flowering in May. The Root is greatly extolled for exciting the Menfes, and expelling the Fœtus and Secundines. When taken internally, by its hot and penetrating Bitterness, it pervades the whole Body, and puts all its Parts into Motion. Hence, by stimulating, heating, drying, and resolving, it is beneficial in many Diseases, as Dropsies, cachymic and leucophlegmatic Cachexies, and violent Obstructions. According to *Du Hamel*, its Root infused for a Night in white Wine, cures the Jaundice, if the Patient uses it three Days successively, fasting. *Simon Pauli* in *Quadr. Botan.* informs us, that it is highly beneficial to Persons subject to scorbutic Asthmas, if it is mixed with anti-scorbutic Potions and Infusions. It is greatly extolled against Diseases of the Joints, and for this Purpose a celebrated German Physician constantly prescribed a Decoction of the Root of this Plant in Conjunction with Succory and China-root. But in Holland an Infusion of the Root in Spirit of Wine obtained a greater Reputation. In *Ephemerid. Nat. Curios.*

Curios. Cent. 5. we are told, that the celebrated *Klaunig* prepared from the Root, an highly saturated Tincture, fifty Drops of which he exhibited in Ale, or some other Vehicle, or in its stead he ordered fifteen Grains of the refinous Extract of the Root in the Form of Pills, being persuaded that all the Virtue was owing to the refinous Part, of which about two Ounces are contained in a Pound. *Æmilius Macer* recommends it against the Gout; but 'tis hardly probable that it will prove beneficial to all arthritic Patients; since by its drastic Quality, it excites violent Heat in the Body. Where there is a Lentor and slow Motion of the Blood, this Root may prove an excellent Preservative, if sparingly used either in Decoctions, Tinctures or Pills. Hence 'tis obvious why, and on what Occasion, the Root proves a good Ingredient in Clysters against lethargic Disorders. Externally applied, it is good for resolving Tumors, and cleansing Ulcers. The Powder of the Root, and its Extract with Spirit of Wine, are used in Liniments, designed for cleansing inveterate, sordid and malignant Ulcers.

Another Species of *Aristolochia* us'd in the Shops, is thus distinguished: *Aristolochia longa*, Offic. J. B. *Longa vera*, C. B. Park. *Altera Radice pollicis Crassitudine*, Cæsalp. Long-rooted Birthwort. This according to *Raii Hist.* grows among the Corn, and in some Vineyards in France, flowering in the Beginning of the Spring. In Virtues it agrees with the round Birthwort, tho' according to *Hoffman*, the former is of a stronger Nature than the latter. *Simon Pauli* with the Powder of this Species of *Aristolochia* boil'd in Water of Paul's Betony, and applied in a linen Cloth, in a few Days, happily consolidated a malignant Ulcer, the Cure of which had in vain been attempted by a Surgeon, for a whole

Year. As the Root is of a spongiouse Nature, some use it instead of Gentian, for Tents to dilate Fistulas.

The third Sort is, the *Aristolochia longa Nostras*, Offic. *Aristolochia tenuis*, Koker. Cat. Hort. Med. Harmel. *Clematitis Restia*, C. B. *Clematitis Vulgaris*, J. B. and *Aristolochia altera radice tenui*. Creeping Birthwort. The Moderns have found this Species to be aromatic, penetrating, aperient, sudorific, detergent and vulnerary. The Root, either in Powder or Extract, is recommended in the hysteric Passion, leucophlegmatic Cachexies, Asthmas, and intermittent Fevers, where the Intentions of Heating and Resolution are to be pursued. According to *Grimmaldus* in *Eph. Nat. Curios. Decad.* 2. *An.* 3. *Obs.* 207. the Leaves are accounted a Specific against Coughs and Asthmas, and the Oil obtain'd from the Roots by Distillation is of great Service in facilitating Labours. The learned *Heldius* in *Eph. Nat. Curios. Cent.* 6. gives us an Account of the signal Virtue of the Root of the creeping Birthwort against the Gout.

Armeniaca Malus, & *Præcocia*, Offic. *Armeniaca Malus Major*, Ger. Emac. The Apricock Tree. It flowers in March and April, the Fruit being ripe about Midsummer. They create an Appetite, provoke Urine, are cordial, pectoral, and promote Expectoration. An Infusion of them is good to allay the Heat of Fevers, and the Kernels are recommended to kill Worms. They are good in hot Weather, for young People that have good Stomachs, and of a bilious and sanguine Complexion. Yet People ought to be cautious of this Sort of Food, which contains a viscid and thick Juice, and sometimes causes Wind and crude Humours. They contain a considerable Quantity of Oil and essential Salt, and much Phlegm.

Armeria. The Name of a Plant which

which is thus distinguish'd. *Armerius pratensis*, Ger. Emac. *Lychnis plumaria sylvestris simplex*, Raii Hist. *Flos Capuli*, *Odentis quibusdam*, J. B. Meadow Pink. It grows in watery Places, flowering in May; the Flowers are in Use. It is a good Alexipharmic, and commended against Poison.

Armoracia, Offic. *Raphanus sylvestris*, Ger. Emac. *Rapistrum album articulatum*, Park. Theat. *Raphanistrum flore albo striato, siliqua articulata striata minore*, Boerh. Ind. A. Wild Radish. It grows among Corn, flowering in June. The Root is used. It warms and dries. It incises mucilaginous tartareous Concretions; it attenuates, resolves, opens Obstructions of the Viscera, is diuretic, lithontriptic, and antiscorbutic.

Artemisia, Offic. *Artemisia Vulgaris Major*, caule & flore purpurascens, & Albicante, Boerh. Ind. A. Mugwort. It grows in Hedges and waste Places and flowers in June. The Leaves or Tops are us'd in Decoctions, Infusions and Baths for the Feet. *Valentinus* in his *Pandectæ Medico-legales* informs us, that the Faculty of Physic at *Leipsic*, being appealed to judicially, in an alledged Case of Murder, whether Abortion could be procur'd by a Decoction of red Mugwort and Cherry Tree Bark in Ale, answered, that Mugwort alone was sufficient to provoke the Menfes, and consequently produce that Effect. But as the Quantity of the Mugwort was not specified, and as the Woman accused had also used other Plants, a formal Verdict was suspended. *Baubine* greatly extols a Decoction of Mugwort edulcerated with Sugar or Honey, for mitigating Coughs, attenuating viscid Humours about the Præcordia, and expelling Stones from the Kidneys and Bladder. *Simon Pauli* affirms, that

he happily cured Patients whose nervous Systems were disordered, who were obnoxious to flatulent Spasms, or who complained of a Weariness of their Limbs after chronical, and sometimes after acute Disorders, by ordering them to sit in a Vessel, near full of the Decoction of Mugwort, and then in the Decoctions of Sage, Agrimony, Chamomile and fine Flower. I know, says he, an old Woman, who after large œdomatous Tumors had seized both her Knees, happily removed them, by fumigating them with folded Linen Cloths over kindled Mugwort. *Baubine* informs us, that Pains and Coldness of the Nerves and Joints, are removed by fomenting them with a Decoction of the Flowers of Mugwort, Chamomile, and Eupatorium. The same Author from *Arnoldus* informs us, that the Flowers of Mugwort, boil'd and applied to the Head after washing it with the Decoction, are of great Efficacy in removing an Hemicrania. *Ray*, from *Parkinson*, informs us, that the recent Herb, or its Juice drank in some proper Liquor, is of all others the most efficacious Remedy for those who have taken too much Opium. In *Ephemerid. Nat. Curios. Vol. 2.* we are told, that a certain Prince learned from *Tabernæmontanus* that Mugwort both internally in Decoctions, and externally in Capaplasms and Powders was of great Efficacy in Burns by Gun Powders, and Gun Shot Wounds, and that the said Prince, had at the Siege of a certain Town cured Numbers by its Means. These Effects are produced by the attenuating, resolvent and consequently aperient Virtues of the Plant. *Julius Pontedera* in his Dissertations informs us, that Mugwort is good against Vertigoes, and Inflammations of the Lungs. There are many fabulous Reports with Respect

to this Plant, such as that it prevents Weariness in Travellers, and that under its Root is found a Coal capable of removing the Epilepsy: But these and other Stories relating to this Plant, are justly looked upon as so many Indignities to human Reason, which is never so much debased as when it yields to Superstition.

Arthanita, Cyclamen, Offic. Cyclamen orbiculato folio inferne purpurascens, C. B. Pin. Boerh. Ind. Alt. Sow-Bread. With us this Root is cultivated in Gardens, but grows spontaneously in the *Alps*, and Mountains of *Affuria* and *Syria*. The Root is of a forcing Nature, and principally used to expel the Birth and Secundines, and excite the menstrual Discharge. The Juice is by some commended as an Eirrhine against vertiginous Disorders of the Head. It is also of Service against cutaneous Eruptions.

Another Sort of *Arthanita* is the *Cyclamen*; *Arthanita, Offic. Cyclamen Hederæ folio, Ger. Emac. Boerh. Ind. A Common Sowbread.* This Species agrees in Virtues with the preceding, and is the Sort which is kept in our Shops.

Arum, Offic. J. B. Raii Hist. Arum maculatum, maculis candidis vel nigris, & non maculatum, C. B. Pin. Boerhaav. Ind. Alt. Cuckow-Pint, or Wake-Robin. It grows in Hedges and Ditches, flowers in May, and produces ripe Berries in July. Tho' *Boerhaave* in *Instit. Med.* and *Lanxoni* think that *Arum*, on Account of its phlogistic and caustic Acrimony is to be classed among the Poisons, yet the Root is used in the Shops, for the Purposes of incising, resolving Mucus, exciting Appetite, and curing intermittent Fevers; but it is not generally exhibited till it is previously macerated in Wine, Vinegar, or Brandy, and afterwards dried. They

who desire strong Effects from this Root, and are not fond of rendering it milder, by disjoining the Spicula of the acrid Salts, use it only simply dried, after taking off its external Covering or Pellicule. The Powder of the Root prepared in both these Manners, is highly extolled as a powerfully stimulating, resolvent, aperient, diuretic and sudorific Medicine, in Disorders of the inveterate and mucous Kind. As *Arum*, in Consequence of its Acrimony, acts by resolving and incising, 'tis sufficiently obvious, that it is proper in many Diseases arising from inactive pituitous and mucous Humours. Thus in a violent Scurvy arising from the Inactivity of the Juices, and in a moist Asthma, the Root triturated and reduced to Pills, is of great Service in resolving the viscid Humours. According to *Helmont*, the Root boiled with Vinegar, is highly efficacious in resolving Coagulations of Blood brought on by Falls from Eminences. According to *Boerhaave*, *Arum* is safest in Decoctions and Infusions; Wine also corrects its Acrimony, and it becomes milder by being boiled. *Arum*, according to *Bauhine*, reduced to a Powder, and mixed with Sugar, is good for those afflicted with a Phthisis, since it incides the thick and viscid Phlegm, assists Expectoration, removes Disorders of the Lungs and Breast, and is useful against a Cough. The Root, whether recent or dry, bruised and exhibited, is highly purgative. The Leaves and Root of *Arum* used in warm Infusions, cure a falling down of the Anus, and some other Disorders of that Part. *Pliny* in *Lib. 24. Cap. 16.* tells us, that the Leaves whether recent or dry are beneficial in the Gout. It is an Ingredient in the *Pulvis Ari Compositus*.

Another Species of *Arum* is the *Arum maximum Ægyptiacum, quod vulg.*

vulgo Colocasia, C. B. *Arum Egypt. rotunda*, & *longa Radice*, *vulgo Colocasia dicta*, Park. The whole Plant is acrimonious like the common *Arum*, but more mild, and is therefore used in Food. *Bontius* says, it is of a venomous Nature, and requires three Days Maceration in Water, to render it eatable.

Arundo. The Reed. Of this there are several Sorts, the first is the *Arundo*, Offic. *Arundo vallisoria*, Ger. Emac. *Arundo vulgaris*, five *Phragmites Dioscoridis*, Boerh Ind. A. *Harundo vulgaris* five *vallisoria*, Park. Theat. Common-Reed. It grows by River Sides, and in Marshes, and agrees in Virtues with the following.

The Second is the *Arundo Donax*, Offic. Park. Theat. *Arundo Cypria*, Ger. Emac. *Arundo sativa*, seu *Donax Dioscorides*, Boerh. Ind. A. The great Reed. Its Root attracts any Matter lodged in Wounds, if reduced to Powder, with Wine, and applied to the Wound. It removes Pains arising from Dislocations of the Limbs, and carries off Pains in the Hips. When bruised, and applied to any Part that akes, it is of wonderful Service. *Hier. Mercurial. Med. Pract. L. 4. C. 2.* If it is boiled in any Lixivium, and the Head frequently washed therewith, it causes the Hair to grow; and cures scald Heads. *Julius Cæsar Claudinus, Ep. Vincenzo Tanar.* says, that the Root of the *Arundo* produced the same Effect in Rheumatisms and Catarrhs, with the Peruvian Bark. It is good for Consumptions. *Aetius* says, it is of a drying and warming Nature, and is therefore of Service to dropical Patients, *Serm. 10. C. 32.* It brings Apostems to Suppuration, *Lev. Lemn. de Herb. Biblic. C. 27.* The green Leaves cut and applied, carry off the Wild-fire and

Erysipelas. Poor People boil the Flowers in Water, or in Beer, which they mix with Honey, and drink, after having filtrated it, in order to cure Coughs, Oppressions of the Breast, and Consumptions.

The third is the *Arundo Tabaxifera*, Offic. *Canna ingens Bambu vel Bambu dicta*, Park. Theat. *Tabaxir* five *Bambu Arbor*, J. B. The Bambu Cane. The Indians use it for Wounds of the Testes and Penis. It is efficacious in cholic Affections, and the Dysentery. It is used in burning Heats, internal and external, and in bilious Fevers and Dysenteries; especially in bilious Fluxes, the Strangury, and bloody Urine. A Decoction of the Leaves and Bark, being drank, purges Wounds of Blood retained in them, and is proper for Women in Child-bed, to cleanse the Uterus after the Birth. These Canes grow in the Sand of the Sea Shores.

Asa foetida, Offic. C. B. *Asa foetida*, Offic. J. B. *Abith* seu *Asa foetida*, *Javanis* & *malais* *Hin Dicta* Bont. Devil's Dung. *Dioscorides*, in *Lib. 3. Cap. 94.* ascribes so many and so powerful Virtues to this, that one would be tempted to think, that all the Disorders incident to human Nature, might be removed by it. But without running into such exaggerated and ill grounded Encomiums, we shall confine ourselves to what we know to be true. *Asa foetida*, then, is a gummy Resin, brought to us in Lumps of different Colours, white, yellowish, blew or brown, which last is the worst of all. It has a very strong, fetid Smell, and the Tree producing it is accurately described by *Kempfer*. *Asa foetida* is justly accounted an excellent Remedy, in all hysteric Disorders, whether smelled to, or mixed with such other Substances as are exhibited internally. It is also said to be good for exciting Sweat

and corroborating the Stomach. The Dose is from twelve Grains to half a Dram. But for the Sake of the Stomach it is often necessary to give it in smaller Doses. Externally it is a good Resolvent, and with that View is made an Ingredient in the *Ceratum de Galbano*. It is an Ingredient in the *Spiritus Volatilis*, *Tinctura fetida*, *Tinctura Fuliginis*, *Pulvis à Myrrhâ compositus*, and the *Pilulæ Gummosæ*.

Asarum, Offic. Ger. C. B. Pin. Raii. Hist. Boerhaav. Ind. Alt. *Nardus Rustica*, Hoffmān. Flo. Altorff. *Asarabacca*. It is planted with us in Gardens, and flowers in June, but the dried Roots are generally imported from *Leghorn*. This Plant is of an acrid and very bitter Taste, nauseous and gently astringent. It is of an emetic and purgative Quality, tho' it does not always operate in these two Manners, but differently according to the Method of its Preparation. The crude Root reduced to a Powder, and exhibited, either in a Bolus, or in some proper Liquor, proves a powerful Emetic and Purgative; but according to *Etmuller* it must be carefully triturated or reduced to a very fine Powder, otherwise it only proves purgative. Half an Ounce of this Root, infused for a Night in Wine, is an emetico-cathartic Medicine, highly extolled against intermittent Fevers, the Dropsy, the Gout, Ischiadic Pains, and especially Dysenteries and Diarrhæas. But if a whole Ounce of the Root is digested with sixteen Ounces of Water, it no longer proves emetic, but operates as a Diuretic. *Etmuller* informs us, that a Decoction of *Asarabacca* with Water well boiled is very diuretic, and a powerful Diaphoretic, in chronical Disorders; especially those arising from some Fault in the *Primæ viæ*. From what has been said 'tis sufficiently obvious, that the Use of

this Plant is proper, in all Cases, where the languid Vessels require a Stimulus, and where tough and viscid Humours are to be resolved. Hence it is an excellent Remedy in Obstructions, not only of the *Primæ Viæ*, but also of the other Viscera, whether by Way of Infusion, when vomiting and purging are necessary; or in Decoctions, when the Cure is to be performed without producing great Commotions in the Body. Hence the Reason is also obvious, why *Asarabacca* has often proved effectual against the Jaundice; intermittent Fevers, and Obstructions of the Menfes. Externally a Decoction of the Plant, used by Way of Fumigation, or dropt into the Ears, is good against Obstructions of the auditory Passage by Sordes, or a Ringing of the Ears.

Another Species of *Asarum* is the *Asarum Virginianum* & *Serpentaria nigra*, Offic. *Asarum Virginianum* *Pistolochiæ foliis subrotundis*, *Cyclamini more maculatis*, Raii Hist. Black Snake-weed. The Roots of this Snake-weed are brought over among the true *Serpentaria Virginiana*, and are promiscuously used with them being diaphoretic, and alexipharmic. It is an Ingredient in the *Pulvis Sternutatorius*.

Asclepias, a Plant thus distinguished, *Vincetoxicum*, & *Hirundinaria*, Offic. *Asclepias flore albo*, Ger. Emac. Park. Theat. Boerh. Ind. A. Swallow-wort. The Roots are bitter, acrid, and give a faint red Colour to the blue Paper; the Leaves are saltish, and dye the Paper of a faint red Colour. A Pound of its Roots macerated in Wine, and boiled to a third Part, provokes Sweat, and is recommended for the Dropsy. A Decoction of this Plant operates both by Urine and Transpiration, renders the Humours volatile, and is preferable to that of *Scorzonera*, in malignant

Fevers and the Plague. The Herb, applied as a Cataplasm, dissolves Tumours of the Breasts, and the Powder of the Root is reckoned a great Counter-Poison, both against the bad Effects of *Apocynon*, and other poisonous Herbs, and against the Bites of venomous Animals. It is also commended against the Jaundice. It grows with us only in Gardens, and flowers in June.

Ascyrum, Offic. Ger. Emac. *Ascyrum vulgare*, Park. Theat. *Hypericum Ascyrum dictum caule quadrangulo*, Boerh. Ind. A. St. Peter's-wort. It grows in watery Places, and flowers in July and August. The Herb, Flowers, and Seed are used; The Herb and Flowers have the same Virtues as *Hypericum* or St. John's-wort. The Seeds are useful in the Sciatica, and purge bilious Humours by Stool. If used in a Cataplasm, they are good against Burnings.

Aspalatus is thus distinguished *Lignum Aspalathi* & *Rhodium Lignum*, Geoff. Tract. Rose-wood, or *Rhodium*. This Tree is by *Herman* and others thought to be a Kind of *Cytisus*. It is according to *Geoffery* brought from the *Morea*, is very resinous and of a grateful Smell resembling that of Roses. It is much esteemed in *China*, where an Infusion of it in Water, is believed highly efficacious, both in curing and preventing many Diseases. An essential Oil is obtained from it, which has so much the Smell of Roses, as to be often substituted for their essential Oil; the Smell of the former, is never so strong as that of the latter.

Asparagus, Offic. Park. *Asparagus Sativa*, C. B. Pin. Boerh. Ind. Alt. *Asparagus hortensis*, J. B. Sparrow-grass. It grows spontaneously in some Parts of *England*, as in *Cornwall* and near *Bristol*, but the best is cultivated in Gardens. The Root of this Plant is

one of the five aperient Roots. Sparrow-grass must be quickly and slightly boiled, otherwise they become viscid and glutinous. *Frida-vallis* informs us, that it is by some used, in order to prove a Stimulus to Venery. When eaten they render the Urine fetid, and when used to Excess, prove so great a Diuretic as to bring on an Incontinence of Urine. *Lisser* speaks in the following Manner. " 'Tis surprizing that the Smell of the Urine is immediately changed by eating *Asparagus*. This denotes a very expeditious Concoction of the Kidneys, on Account of the septic Quality of the Herb; for which Reason it is by some said to corrode the Bladder." *Etmuller* is of Opinion that Sparrow-grass is injurious to Patients disposed to nephritic Disorders. That the copious Use of them is prejudicial to the Urinary Passages, we are informed by *Lanzonius* in *Eph. Nat. Curios. Vol. 1. Obs. 92.* where he give us an Instance of a Discharge of bloody Urine by the Abuse of them. In *Eph. Nat. Curios. Dec. 2. An. 5.* we are told, that a Woman of a sound healthy Constitution, was rendered barren by the too frequent Use of Sparrow-grass, but became prolific when she desisted from the Use of them. *Dioscorides* affirms, that Sparrow-grass is purgative and diuretic, whereas *Hippocrates* says, that they are dry and produce Costiveness. But this is a Point to be decided by every one's own Experience, since such are the Peculiarities of different Habits and Constitutions, that what proves purgative to one, frequently produces the opposite Effect in others. Upon the whole it may be asserted that Sparrow-grass is inciding, stimulating, aperient, and principally disposed to act upon the urinary Passages, for which Reason it is classed among the diuretic

Medi-

Medicines. On Account of its diuretic or rather aperient Quality, it is fit for exciting the menstrual Discharge, and perhaps this is the Reason, why the excessive Use of it, brought on Sterility in the Woman before mentioned, because by resolving the Blood, and promoting a too copious menstrual Discharge, it might by that very Means prevent Conception. The inciding and resolvent Virtues of *Asparagus*, are by *Simeon Sethi* described in the following Manner: "Sparrow-grass is good against Colics and nephritic Disorders produced by Phlegm. It augments the Inclination to Venery, and passes sooner into the Blood, than other Pot-herbs. It excites the Menses, is good against Palpitations of the Heart, and proves beneficial to the Teeth." The Roots are used in Decoctions, and their principal Efficacy is thought to be lodg'd in their Bark.

Another Sort of *Asparagus* is the *Asparagus sylvestris*, *Diosc.* *Asparagus sylvestris, tenuissimo folio*; C. B. Pin. Boerh. Ind. A. Wild Sparrow-grass. This only differs from the preceding by Culture, its Root is glutinous and sweetish like the former, and gives a faint Tincture of red to the blue Paper, which makes it probable that its Salt resembles vitriolated Tartar, so that it is dissolved in a great deal of Phlegm, thicken'd with some Earth and Sulphur, by which the Root is an Aperitive, a little temper'd.

Another Kind is the *Asparagus petraea* & *corruda*, *Offic.* *Asparagus petraea*, Ger. Emac. *Asparagus petraeus, sive Corruda aculeata*, Park. Theat. Rock Sparrow-grass. The young Shoots and Roots of these, are used in the same Intentions, as those of the *Asparagus sativus*.

Asperula, Aspergula, *Offic.* *Asperula seu Rubula montana odorata*,

C. B. Pin. *Asperula odorata flore albo*, Boerh. Ind. A. Wood Roof. It grows in Woods and Copses, flowering in May. It is esteem'd a good Hepatic, and is recommended for Inflammations of the Liver, and Obstructions of the Gall Bladder, and the Jaundice. The Germans use it in their Wine, as we do Borrage and Burnet, as a great Cordial and Comforter of the Spirits. The green Herb bruised, is made use of by some Country-Folks to allay hot Tumors and Inflammations, and is apply'd to fresh Cuts.

Asphodelus verus albus, *Offic.* *Asphodelus albus ramosus mas*; C. B. Pin. Boerh. Ind. Alt. White Asphodel. It grows spontaneously in Italy, Spain, and the Southern Parts of France; but with us is cultivated in Gardens, and flowers in May. The Root, according to *Dioscorides*, is heating, diuretic, and emmenagogue. A Decoction of the Roots in the Lees of Wine us'd externally, cures fordid and spreading Ulcers of the Breasts, Inflammations of the Testicles, Tubercles and Boils. From what has been said it is obvious, that Asphodel proves beneficial, in Consequence of that Acrimony, by which the nervous and fibrous Parts are put in Motion, and the viscid and tenacious Humours incided, and resolv'd; so that *Galen* seems to have been in the Right, when he asserted, that Asphodel as well as *Asarabacca* and *Arum*, was of an astringent and discutient Nature. According to *Fernelius*, the Juice of the Root, boil'd with Oil, cures Chilblanes, and the Root itself bruised and applied is, by *Forestsus*, said to cure the Kings Evil.

Another Species of *Asphodel* is the *Asphodelus verus luteus*, *Hastia Regia*, *Offic.* *Asphodelus luteus, & flore & radice*; Boerh. Ind. A. Kings Spear. It is call'd by some *Anthericum*, which according to the Fiction of *Lucian*, the Ghosts of the damn'd

eat in Hell. It grows in many Parts of Italy, France, and Spain. The Root is principally used, which is hot and of a strong bitter Taste. Fallopius reckons it among the best of the milder Cathartics. It is of a warming, drying, opening, discussing, purgative and cleansing Nature. It excites a Discharge of the Urine and Menfes, is good for Spasms, cures Ruptures, Jaundice and the Dropsy. The Root boiled in Wine or Water, and sufficiently triturated when dry, cleanses and cures old corrosive and fetid Wounds and Ulcers, Swellings of the Breasts, and Pudenda, as also bloody Ulcers; it cures scrophulous Swellings being bruised and laid upon them, and heals Chilblanes, whether exulcerated or not. Washing the Body with Vinegar, wherein the Root of this Plant has been boiled, cures the Itch, and other scorbutic Eruptions. Some roast the Root in hot Ashes, and rub their Faces and Hands with it, in order to remove all Blotches, and purify the Skin. The Root, also, makes the Hairs grow fast and curl. This Root reduced to Powder, and mixed with calcined Alum, corrodes the fungous Flesh of foul Ulcers, if apply'd to them. If this Root be put into the Water which Swine drink, it prevents their being affected with a pestilential Leprosy; or if they are so, it restores them to their natural State. It also produces the same Effect, if they are frequently washed with such a Water.

Asplenium, Ceterach & Scolopendria, Offic. *Asplenium sive Ceterach*, Ger. Emac. Spleenwort or Miltwast. It grows upon old Stone-Walls, and Buildings, especially in the West of England. It is one of the five capillary Plants, taking its Name from curing Diseases of the Spleen, removing Swellings thereof, and preventing its too great Largeness, whence also it is called *Miltwast*; it opens Obstructions of the Liver,

alleviates the Jaundice, and is recommended for the Rickets in Children.

After Atticus, Offic. Ger. Emac. *After luteus, foliolis ad florem rigidis*, C. B. *Astericus annuus foliis ad florem rigidis*, Boerh. Ind. A. Golden Starwort. This Plant is found in the Gardens of Botanists, and flowers in May. Its Leaves, are of a vulnerary Nature, though seldom prescribed in Practice. The Leaves and the Herb is of Service in preternatural Commotions and Heats of the Stomach, Inflammations of the Eyes, the falling down of the Fundament, and Tumors, in the Groins. The Water distilled from its Flowers, if drank, is of Service in Quinsies, and the epileptic Fits of Children.

Astragalus, Offic. *Astragalus syriacus*, Ger. Emac. Park. Theat. The Silk Vetch of *Dioscorides*. It grows in windy and shady Places and where much Snow falls. Its Root, drank in Wine, stops a Looseness, and provokes Urine; dried to a Powder, it is with good Effect sprinkled on old Ulcers, and stops Bleeding. Its Root is sweetish, astringent, and gives a deep Tincture of red to the blue Paper; the Leaves give it scarcely any, they are bitter and smell like Elder, which shews that the fetid Oil is found in greater Quantity in the Leaves, and that it involves the acrid Salt and Earth. An Infusion of this Plant in Wine, is given for the Gravel, by some Botanists at Paris.

Astrantia nigra, Offic. *Astrantia major, corona floris purpurascens*, Boerh. Ind. A. Black Masterwort. This Plant is cultivated in the Gardens of Botanists, and flowers in July. Its black and fibrous Roots are only used. It is said to purge melancholic Humours; and *Dodonæus* thinks that it resembles the *Veratrum nigrum* of *Dioscorides*, both in its Form and Qualities. *Hildanus*

prescribes it for the Cure of a Scirrhus Spleen.

Atractylis, Offic. Ger. Emac. *Cnicus Atractylis lutea dictus*, Boerh. Ind. A. Distaff Thistle. It grows in Italy and Greece, and flowers in Summer. The Leaves only of this Thistle are used. It is aperitive, sudorific, a good Antidote against Poison, and is particularly recommended against the Stinging of Scorpions.

Atragene, Offic. *Viorna*, Ger. Emac. *Clematis Sylvestris latifolia*, Boerh. Ind. Alt. Travellers Joy. This Plant is found under Hedges, flowering in July. Its Flowers, Bark, Seeds and Root, are of a caustic Quality. The Bark applied to the Skin raises Blisters.

Atriplex. There are various Species of this Plant, but that most in Use is distinguished thus, *Atriplex*, Offic. Chab. *Atriplex alba bortenensis*, J. B. Raii Hist. *Atriplex bortenensis alba, sive pallide virens*, C. B. Pin. Boerhaav. Ind. Alt. White Orache. *Galen* informs us, that this Herb is but little nutritive, and at the same Time proves injurious to the Stomach. *Pythagoras*, according to *Pliny*, was of Opinion, that it was not only concocted with Difficulty, but also brought on Dropsies, Epilepsies and Paleness. *Hippocrates* says, that Orache is of a moist Quality, without being purgative. This Herb when boiled is not only safe, but also beneficial, when the Body requires Refrigeration and Humectation. It is one of the five emollient Herbs, and frequently used, especially in moistening, emollient, and refrigerating Clysters. *Morison* tells us, that the Seeds of the Plant are said to be emetic and purgative, for which Reason *Dioscorides* seems to have affirmed, that if drank with Hydromel it cured the Jaundice.

Another Species of Orache is the *Atriplex olida*, Offic. Ger. Raii Hist.

Atriplex foetida, C. B. Pin. *Che-nopodium foetidum*, Boerh. Ind. Alt. Stinking Orache. It grows on Dung-hills and waste Places. This Herb is in a peculiar Manner appropriated to the female Sex, being aperient, deobstruent, beneficial in uterine Disorders, good to promote the menstrual Evacuations, to expel the Secundines, alleviate Child-bed Purgations, appease Strangulations of the Uterus, and remove hysteric Fits. It is generally exhibited in Decoctions.

Avena, of this there are various Species, but the most common, and at the same Time the best for Use is thus distinguished *Avena*, Offic. *Avena alba*, J. B. Raii Hist. *Avena vulgaris seu alba*, C. B. Pin. Boerh. Ind. Alt. Oats. This Grain is of singular Use, not only for Food, but also for various medicinal Purposes. Thus *Hoffman* in *Tr. de Remed. domest. Præstant.* when treating of the Decoction of exorticated Oats, speaks thus: "Among all the
" domestic Remedies, none is more
" valuable than this, which is high-
" ly proper in all Disorders ari-
" sing from an Acrimony of the
" Blood, or of the Humours in
" the Primæ viæ, as in Coughs,
" Catarrhs, Coryzas, purple Fe-
" vers, Measles, Small-pox, bilious
" and choleric Fevers, Diarrhæas
" arising from a Redundance of a-
" crid Bile, and Erosions of the In-
" testines. I have frequently, in the
" above Disorders, with great Suc-
" cess, ordered a few Pugils of com-
" mon Chamomile Flowers, to be
" boiled in this Decoction, which is
" also commodiously injected as a
" Clyster in the same Disorders." A Decoction of entire Oats, is also an excellent moistening Medicine against febrile Heats, because it resists the Alcalescence of the Humours, by Means of its great Tendency to Acidity. *Hoffman* also in

the same Treatise, tells us, that a Decoction of Oats in Water, with the Addition of Succory-Root, Nitre, Honey, and Poppy-Flowers, is of all others the most efficacious Drink, in all acute Diseases, Pains especially of the gouty Kind, and for purifying the Blood in scorbutic Patients. Various other Substances, may be added to this Decoction, according to the different Intentions to be pursued. *Boeclere* highly extols a Jelly of Oats, in hectic Cases, taken in the Broth of Oysters and River Crabs. Oats are no less useful for external Purposes; for when put into a Bag, and warmed, they are successfully applied against Gripes of the Abdomen, for dissipating the Flatulencies of hysteric Women, and mitigating various Pains, especially of the nephritic Kind, arising from Cold. *Galen* affirms, that Oats nourish little, whereas *Ray* asserts, that those who live upon them, are healthy, and live to a great Age. But notwithstanding this, *Galen's* Opinion was not without Foundation; since Oats afford but little Nourishment to such as are weak, because they are not easily digested by them; for concocted and not crude Substances, only prove nutritive. *Hoffman* orders Oats to be carefully freed from the Darnel or Tares mixed with them, by which Means the Liquors prepared from them will have no bad Influence on the Head, which is found from Experience to proceed from the Darnel.

Aurantia. A Fruit Tree thus distinguished, *Malus Aurantia*, Offic. Ger. Rari Hist. *Malus Aurantia major*, C. B. Pin. *Aurantia vulgaris*, Boerhaave Ind. Alt. The Orange Tree. This grows in great Plenty in Italy, Spain and Portugal, and bears Flowers and Fruit all the Year, but the Fruit is principally

gathered in October and November. The Sevil Orange is only used in Medicine. The yellow Rind of Orange Peel, is of a stimulating, heating, and consequently stomachic Quality. It is, also, carminative, corroborative and cardiac. Recent Orange Peel put up the Nose, in the Morning before eating, as also in the Evening, excites Sneezing, and purges the Head, without producing any bad Effects. A Scruple, or half a Dram of the Peel, reduced to a Powder, and exhibited in any proper Liquor, is beneficially exhibited in Flatulences and Gripes proceeding from a cold Cause, as also against Worms of the Intestines. When taken in Wine it produces the Effects of an Alexipharmic, in the Time of the Plague. In difficult Discharges of Urine, it is exhibited in Chervil or Parsley Water. The Peel reduced to a Powder with Honey and Alum, is greatly extolled as an Ointment for the spreading Ulcers in the Mouths of Children, called *Aphthæ*. According to *Schulzcius in Praelect.* an Essence obtained from dried Orange Peel with Spirit of Wine, is an excellent stomachic, carminative, and analeptic Medicine. The white Pulp of the Peel, is of an astringent Nature. The acid bitterish Juice of the Fruit, is refrigerating, gently astringent, and consequently proper for corroborating the relaxed Fibres of the Stomach, and correcting the alcalescent State of the Humours. *Labat* in his History of America informs us, that the Juice of the Fruit is there used externally for the Cure of inveterate and venereal Ulcers. The Leaves and Flowers are also used for several medicinal Purposes. It is an Ingredient in the *Conserve Flavedinis Corticum Aurantium*, *Succus Scorbuticus*, *Aqua corticum Aurantium*, *simplex* & *spirituosa*, *Aqua Raphani composita*, *Infusum Amarum simplex*, &c.

& purgans, *Vinum Ipecacuanhæ*, *Tinctura amara*, and in the *Syrupus e Corticibus Aurantiorum*.

Auriculæ Indæ & *Fungi Sambuci*, Offic. *Fungus Membranaceus auriculam referens, sive Sambucinus*, C. B. Pin. Raii Hist. *Agaricus auriculæ forma*, Boerhaav. Ind. Alt. Jews Ear. This is a Sort of Fungus adhering to the Trunk of the Elder Tree, generally of the Form and Bulk of a Man's Ear, sometimes larger and sometimes smaller. It is a membranous, cartilaginous Substance, of a blackish grey Colour, and according to *Lemery* it contains a great Deal of Oil and volatile Salt. When immersed in Water it becomes soft and turgid like a Sponge. When boiled in Milk, or macerated in Vinegar, it is ordered as a Gargarism in Quinsies, and other Tumors and Inflammations of the Throat. When boiled in Wine, it is by some recommended in an Anasarca, but others assert, that its internal Use is unsafe. When previously macerated, it is by some ordered to be applied to Parts affected with the Gout.

Auricula Ursi, Offic. *Auricula ursi flore luteo*, Boerhaav. Ind. Alt. Raii Hist. Yellow Bears Ears. This Herb grows in great Plenty about *Utrecht*, *Styria*, *Tyrole*, and *Switzerland*, about the Middle, and on the Tops of large Mountains, and in many other Places. The Leaves are recommended for their vulnerary, abstergent Qualities, whether taken internally or us'd externally, or their Juice apply'd externally in Ointments and Plaisters. The Juice of the Flowers is said to remove Freckles and render the Skin white. According to *Gesner*, the Root if chewed, alleviates Tooth-achs, especially such as arise from cold Defluxions, proves beneficial to the nervous Parts, and heals putrid Ulcers. The Juice infused in Chops of the Skin produc-

ed by Winds and Cold, is said to heal them in a short Time.

Azedarach, & *Pseudo Sycomorus*, Offic. Boerh. Ind. A. The Bead-Tree. The Flowers of this Tree are said by some, to be aperient and de-obstruent; but others say they are poisonous.

Balaustia, Offic. Ger. Emac. *Malus Punica Sylvestris major, sive Balaustum majus*, Park. Theat. *Punica flore pleno majore*, Boerh. Ind. A. The Balaustine Tree. *Balaustines* are of an earthy Nature, very astringent, inspissating, refrigerating and drying; whence they are very often used for all Kinds of Fluxes, as the Diarrhœa, Dysentery, the uterine Flux, and others; and for stopping of Hæmorrhages from Wounds. It is an Ingredient in the *Pulvis e Succino compositus*.

Balsamina. There are two Sorts of this Plant, the first of which is the *Balsamina* & *Momordica*, Offic. *Momordica vulgaris*, Boerh. Ind. A. Male Balsam Apple. It is cultivated in Gardens, and flowers in *August*. The Fruit, which is the Part used, is of a refrigerating and somewhat drying Quality, a Vulnerary, and mitigates Pains, especially of the Hæmorrhoids. Outwardly it is good for Wounds of the Nerves, Herniæ, and Combuſtions.

The other *Balsamina* is thus distinguished, *Balsamina lutca, sive Noli me tangere*, Boerh. Ind. A. *Periscaria siliquosa*, Offic. Quick in Hand, Touch me not. It is cultivated in Gardens, and the Herb is used, which is so forcible a Diuretic as to induce a Diabetes, and is thought to be of a pernicious and deleterious Quality.

Balsamita mas, Costus Hortorum, Offic. Ger. Emac. *Balsamita major*, Boerhaav. Ind. Alt. *Mentha bortenſis corymbifera*, C. B. Costmary. The whole Plant is of a soft pleasant Smell, is cultivated in

Gardens, and flowers in *July*. The Leaves are principally used, being of a warm and drying Nature, good to heat and corroborate the Stomach, and to alleviate Head-achs arising from any Disorder of it, to expel Wind, and prevent acid Eructations. This Plant is said to resolve Obstructions of the Liver and Spleen; and is good against the Dropsy and Jaundice. Externally it is used in heating Fomentations for corroborating the Limbs.

Balsamum Capivi. This is obtain'd by making an Incision in a Tree thus distinguish'd. *Capivus*, Offic. Pharmacopol. *Copaiba*, Raii Hist. *Balsamum Copaiba*, Geoff. The white American Balsam Tree. The Balsam of Capivi is produc'd in *Brasil*, and brought to us from *Rio de Janeiro*, *Fernambouc*, and *St. Vincent* in earthen Vessels. There are two Sorts of it, the one very limpid and the other pretty thick, and of the Consistence of Turpentine; but this Difference depends upon the different Seasons of gathering it. The limpid Kind, according to *Hoffman*, is most esteem'd both for internal and external Purposes; for when dissolv'd in Tincture of Tartar, it is successfully exhibited for a *Fluor albus*, *Gonorrhæas*, and Disorders of the Kidneys and Bladder. Externally it is an excellent Liniment for the Consolidation of Wounds and Ulcers, and for corroborating the nervous Parts, which have been weakened by the Shock of any Disease. Nor is it less beneficial when applied to Parts weaken'd and become unfit for Motion in Consequence of gouty Pains; *Hoffman* has in his *Obs. Chym.* shewn, that excellent pectoral and vulnerary Balsams, for internal Use, may be prepar'd by mixing this with other Ingredients, and that it may be more commodiously used than Turpentine for increasing the Quan-

tity of ethereal Oils in Distillation.

Balsamum e Mecha. This is obtain'd from a Tree distinguish'd, *Balsamum indicum*, *Gileadense*, *Mecha verum*, et *opobalsamum*, seu *oleum Balsami*, sive *Balsamelæon*, Offic. *Balsamum verum*, J. B. The true Balsam Tree. The Antients call'd the Wood of this Tree *Xylobalsam*, its Fruit *Carpobalsam*, and its Juice or Tears *Opobalsam*. Many are of Opinion, that there is now no such Thing as the true *Opobalsam*, and that the genuine Species, of old produc'd in *Egypt* is not to be met with in any Part of the World; but *Hoffman* is of a different Opinion, because the Balsam of *Mecha* is of equal Efficacy with the *Opobalsam* of the Antients; for which Reason he concludes that to be the same. According to *Pomet*, it is an excellent Diaphoretic in malignant Fevers, and of great Efficacy in deterging Ulcers of the Lungs, Kidneys, and Bladder. But the Use of it ought to be avoided in inflammatory Dispositions of these Parts, even tho' ulcerated. Neither ought it ever to be exhibited where there is an *Erysipelas* in any Part of the Body. It is used with Success in *Gonorrhæas* and the *Fluor albus*, being given from ten to twelve Drops in the Morning fasting, the Patient's Body being duely prepar'd, and the Running having continued for some Time. It is used externally as a Detergent, in Wounds not attended with Contusion.

Balsamum Ipecueba. This is obtain'd from a Nut in *Brasile*, call'd *Becuiba* which is as large as a Nutmeg, and of a brown Colour. It consists of an oleous Kernel, inclosed in a brittle woody Husk. The Balsam drawn from it is, according to *Geoffrey*, much esteem'd in rheumatic and paralytic Cases.

Balsamum peruvianum. Peruvian Balsam

Balsam. Of this there are two Kinds, the white and the black. The former is thus distinguish'd. *Balsamum peruvianum album, seu Styrax alba*, Ind. Med. *Balsamum album*, Park. Theat. *Balsamum peruvianum album*, Geoffr. White Peruvian Balsam.

The black Peruvian Balsam is thus distinguish'd: *Balsamum peruvianum*, Offic. *Balsamum peruvianum nigrum*, Park. Theat. *Balsamum ex Peru*. J. B. The natural Balsam Tree. Peruvian Balsam is brought from *America* and *Mexico* in *New Spain*; but the white is accounted best and is by Way of Eminence call'd *Balsam of Incision*, because according to *Monardus* it flows spontaneously from a Tree of a large Size, upon making an Incision in it. This Species is limpid, of the Consistence of Turpentine, of a fragrant Smell, and much scarcer and dearer than the black Sort; but it is often adulterated with Venice Turpentine. The black Sort, of which large Quantities are imported to us, is according to *Clusius* prepar'd by boiling the Branches, Bark, and Leaves of the Tree. But this Species is also often adulterated, probably with liquid Storax. The adulterated Sort is thick and coagulated, wants the penetrating Smell and Taste, and is with great Difficulty dissolv'd in Spirit of Wine, but remains like a thick and oleous Magma. When one Part of genuine Peruvian Balsam is intimately mix'd in a Mortar, with an equal Weight of Salt of Tartar, and highly rectified Spirit of Roses is pour'd upon it, by being subjected to Distillation in a sand Heat, it affords a fragrant and delicate Spirit, which is of singular Efficacy, especially if exhibited in a Solution of Amber or Musk. This Medicine if used internally, restores lost and impaired Strength, and being very friendly to the nervous System, pow-

erfully contributes to remove those Disorders which arise from its Weakness. An extemporaneous balsamic Syrup of many and great Uses, may be prepared by mixing an Ounce of it with one Pound of Rose-water and Sugar. This Syrup is commodiously mixed with stomachic and cephalic vinous Spirits. If *Peruvian* Balsam is distilled with the Worm and Refrigeratory, it not only gives the Water a grateful Smell like that of the Balsam, but also renders it nervine and diuretic. This Water if liberally drank, is of excellent Service in chronical Disorders, arising from the Scurvy, and a Weakness of the Nerves.

The black *Peruvian* Balsam, according to *Geoffroy*, is of a warming and strengthening Nature, comforting the Brain and nervous System; proves beneficial in Asthmas, the Colic, and Pains of the Stomach and Intestines. Externally used it corroborates the Nerves, alleviates the Cramp, relieves all Kinds of Convulsions, and Contractions of the Sinews, old Achs and Pains. It is, also, serviceable in Cuts and green Wounds. The celebrated *Hoffman* in his *Observ. Physico-chym.* has given an Account of some Medicines of singular and uncommon Efficacy, obtained from the Peruvian Balsam by Means of various chymical Processes. It is an Ingredient in the *Pilulæ aromaticæ*.

Balsamum Tolutanum, Balsam of Tolu. This is the Produce of a Tree thus distinguished, *Balsamum Tolutanum*, Offic. *Balsamum Tolutanum foliis Ceratiæ Similibus, quod candidum*, C. B. Pin. The Balsam Tree of Tolu. This Balsam is imported from Tolu in the *West Indies*, is of a tough resinous Consistence, growing dry and friable by Age, of a yellow brown Colour, of an highly fragrant Smell, and aromatic Taste. This is an excellent Pectoral

toral Medicine, and consequently of great Service in all Disorders of the Lungs, as Coughs, Asthmas, and Consumptions; but what renders it still more valuable is, that it has no nauseous oleaginous Taste, as most other native Balsams have. With Sugar and the Yolk of an Egg it makes an agreeable Emulsion. It is also said to be restorative, to strengthen the Vesiculæ Seminales, and stop old Gleets, and Strains, in either Sex. Externally applied, it deterges and consolidates Wounds, resists a Gangrene, strengthens the Nerves, and is good against a Rheumatism and Sciatica. Its Dose, according to *Geoffroy*, is from six to eight Grains. It is an Ingredient in the *Syrupus Balsamicus*.

Banana, Offic. *Ficoides*, seu *Ficus Indica*, longissimo, latissimoque folio, caule macculato, fructu minore, *Boerh.* Ind. A. The Banana Tree. It grows in *America*. The Virtues ascribed to the Fruit of this Tree, are to nourish much, to excite Urine, and provoke to Venery.

Bangue, Offic. *Raii Hist.* *Bangue Cannabi similis exotica*, C. B. Pin. *Bangue*. The Leaves are like those of Hemp, and have an insipid earthy Taste. The *Indians* use the Seeds and Leaves of this Plant for various Purposes especially for procuring an Appetite, and rendering them vigorous in their Amours, for making them forget their Cares, and enjoy a sound Sleep, and agreeable Dreams. Mr. *Ray* from whom this Account is taken, says he learnt from Sir *Hans Sloane*, that it was a different Plant from Hemp. It grows in *Indostan*, and other Parts of the *East Indies*, where it is principally in Use.

Banilia, is thus distinguished, *Vanilia*, *Banilia*, Offic. *Volubilis siliquosa, mexicana, foliis Plantaginis*, *Raii Hist.* *Vanelloes*, or *Banilas*. They grow in *New Spain*, and other

Parts of the *West-Indies*, whence they are brought to us. In *Britain* they are only used as an Ingredient in Chocolate, to which they give a pleasant Flavour: By *Hernandez in Descr. Rev. Medic. Nov. Hispan.* they are said to be grateful to the Stomach and Brain, to expel Wind, to provoke Urine, to promote the Birth, and bring away the Secundines, to resist Poison, and cure the Bites of venomous Animals.

Barbarea, Offic. Ger. *Emac.* *Barbarea flore simplici*, Park. *Theat.* *Sisymbrium Eruca folio, flore luteo*, *Boerh.* Ind. A. Winter Cresses. It grows in the Fields, and is cultivated in the Kitchen Gardens for Sallad. It contains a great deal of essential Oil and Salt. It is deterfive and vulnerary, excites Urine, and is recommended for the Scurvy, Diseases of the Spleen, and for the nephritic Colic, either used internally or externally. The expressed Juice of the Herb cures a Defluxion of scetid and scorbutic Humours in the Mouth, and Looseness of the Teeth, and Excrescences of the Mouth, if the Gums are rubbed with it. The Herb boiled in Wine or Milk, cures sciatic Pains, if Lint is soaked in it, and applied hot to the Part afflicted. The Seed provokes Urine, and expels the Stone: And may also be used in Sinapisms and Veficatories.

Bardana, the Name of a Plant of which there are several Species, the first is the *Bardana major*, & *Lappa*, Offic. Ger. *Emac.* *Lappa major Arcium Dioscoridis*, *Boerh.* Ind. A. J. B. Burdock. It grows almost every where by the Way-sides, and flowers in June and July. The Roots, Leaves, and Seeds are used. The Roots are sudorific, alexipharmic, and good in malignant Fevers, for which Reason they were an Ingredient in the *Aqua Theriacalis*. They are, also, used against the Gout

Gout and Pains in the Limbs. The Leaves boiled in Milk, and applied as a Cataplasm, also, answer the same Intention. They are good for Burns and Inflammations, and for that Reason were ordered the *Unguentum populneum*. The common People frequently apply them to the Feet and Wrists in Fevers. The Seeds reduced to a Powder and exhibited in white Wine, are good to provoke Urine and alleviate Fits of the Stone.

Bardana arctium, Offic. *Lappa major montana*, *capitulis tomentosis*, seu *arctium*, C. B. Boerh. Ind. Alt. Woody-headed Burdock. This grows about ruinous Buildings, and the Way-sides, and flowers in July. According to Dale the Roots and Seeds are used in Medicine, and have the same Virtues with the former. A Decoction of them in Wine, held in the Mouth, mitigates the Tooth-ach; when used as a Fomentation, it removes Burns and Chilblanes, and when drank in Wine, is good for the Sciatica and Strangury.

Bardana, Offic. *Lappa Minor*, *Xanthium Dioscoridis*, C. B. *Xanthium*, Boerhaav. Ind. Alt. Louse-Bur. This is a much smaller and lower Plant than common Burdock, but is little used in Medicine, tho' some commend it in scrophulous Tumours, the Juice being taken inwardly, and the Leaves applied to the Swellings. *Mattbiolus* extols it much as a Plant of singular Efficacy against the Leprosy.

Basilicum. This is the *Ocinum Basilicum*, Offic. *Ocinum vulgatum*, C. B. Pin. Boerh. Ind. Alt. Common Basil. It is sown in Gardens, flowering in July and August. The Ancients condemned the inward Use of Basil, as hurtful to the Sight. *Schroder* says it clears the Lungs of Phlegm, and provokes the Menes.

Battata Virginiana, Offic. Park. Theat. *Solanum tuberosum esculentum*,

Boerh. Ind. A. *Virginia*, commonly called *Irish-Potatoes*. They are Emollient, good to prevent and cure Disorders proceeding from, or attended with a Rigidity or Stricture of the Fibres, and are therefore proper Food for those who use much Exercise.

Bdellium, Offic. Park. *Bdellium annium auctorum*, Raji Hist. *Bdellium gummi*, Ind. Med. Gum Bdellium. According to *Pliny in lib. 12. cap. 9*. The Tree which produces this Gum is prickly, black and as high as the Olive Tree, bearing Leaves which are ever green, and greatly resemble those of the Oak. There are terrible Disputes about the Parts of the World in which this Tree is produced; since some will have it the Native of the *Saracens* Country, others of *Petra*, and others of still different Parts; so that among such a vast Variety of Sentiments, it seems hard, if not absolutely impossible, to distinguish Truth from Error. In the mean Time, forgetting the Speculations of the Curious, we shall confine ourselves to what is certain and evident. The Gum Bdellium, then, is of a reddish brown Colour, deeper than that of Myrrh, and of a more tough and tenacious Consistence. It is with Difficulty dissolved in any Liquor, has a bitterish Taste, and a Scent next to that of Myrrh, tho' not so pleasant. What is imported from *Turky* and the *Indies*, is accounted best. There is, also, another Sort brought from *Guinea*, which is whiter, in large round Lumps, and of little or no Smell, but this Species is less esteemed than the other. This Gum is of an hot and drying Nature, and is said to be beneficial against Coughs and Imposthumations of the Lungs, to provoke Urine and the Calamenia, and to expel the Secundines. Externally it is used as an Ingredient in dissolving and discuti-

ent Plaisters. According to *Dioscorides in lib. 1. cap. 80.* when diluted in fasting Spittle, it discusses Tumours about the Throat, and an Hydrocele, used as a Pessary, or by Way of Suffumigation, it relaxes the Vessels of the Uterus and evacuates all Kinds of Humidity. Being drank in some proper Liquor, it is said to dissolve the Stone, and cure those who are bitten by venomous Animals. It is also good in Ruptures, Convulsions, Plurisies, and erratic Flatulences.

Beccuba Nux. This is a Nut of a brown Colour, and as large as a Nut-meg. It consists of an oleous Kernel, inclosed in a woody brittle Husk. There is drawn from it an excellent native Balsam, highly esteemed in rheumatic and paralytic Cases.

Bedeguar, the spongy Excreescences of the *Rosa Sylvestris* are thus called by some Writers on the *Materia Medica*. The Ashes of these burnt, are said to be effectual against the Gravel, and Dysury, and to incline the Person who lies upon them to sleep.

Behen album, Geoff. Tract. *Jacea orientalis patula, Carthami facie, flore luteo magno*, Tourn. Inst. *Serratulæ affinis, capitulo squamoso luteo, ut & flore*, C. B. Pin. White Bean of the Antients. White Bean is a Root, which *Rauwolfius* found at the Foot of Mount *Libanus*, and *Tournefort* brought from the lesser *Asia*. It is cordial, antispasmodic, and good to kill Worms.

Behem album, Offic. Ger. *Behem album*, Offic. J. B. *Lychnis Sylvestris, quæ Behem album vulgo*, C. B. Pin. Spattling Poppy, or white Ben. The Root of this is the only Part used in Medicine, and is accounted cordial, cephalic, alexipharmic, and a Provocative to Venery. It flowers in Summer, and is frequently to be met with in Meadows,

and Corn Fields.

Behem rubrum, Limonium, & Behem rubrum, Offic. *Limonium majus vulgatus*, C. B. Boerh. Ind. Alt. Sea Lavender. It grows in Salt Marshes, and flowers in *July* and *August*. It is imported in round Slices. It is supposed to have the same Virtues, as the white Ben of the Antients, and moreover to be astringent. The Root and Seed is of Service in a Diarrhœa, Dysentery, and against excessive menstrual Discharges and the *Fluor albus*.

Belladonna. This is the *Solanum lethale*, Offic. Ger. *Belladonna majoribus foliis & floribus*, Boerhaav. Ind. Alt. Deadly Night-shade. It grows among Rubbish, and by Highways, and flowers in *June* and *July*. The Fruit of this Plant taken internally is highly dangerous, as appears from many Observations which occur in the Works of practical Authors. The Leaves are said to be great Sweetners and Resolvents. Externally they are applied to the Piles and Cancers. Some boil them with Whey, or make Use of its Juice. Mr. Ray greatly extols the Leaves in carcinomatous Ulcers and Indurations of the Breasts. Notwithstanding the deleterious Nature of this Plant, some have ventured to give an Infusion of it in Wine, as a Cure for a Dysentery; and others have given a small Quantity of its Juice boiled up to the Consistence of a Syrup, with Sugar, as a Narcotic; but this Practice is rather empirical than rational, and at best very hazardous. Gerard informs us, that at *Wibich* in the Isle of *Ely*, three Children eat the Berries of this Plant, by which Means two of them died, whilst the third was recovered by drinking Honey and Water till he vomited plentifully. Mr. Ray from *Hæchstetterus* informs us, that a mendicant Friar at *Rome* by drinking

an Infusion of this Plant in Wine, lost his Senses, but was brought to himself by drinking a Glass of Vinegar. I know an Instance of a Man and his Wife, Child, and Father, who were rendered mad by eating this Plant boil'd as Greens; and a Dog who laped the Broth in which they were boiled had the same Fate. The Dog recovered the same Day; the Man and his Wife, the next; the Child in two or three Days; and the old Man in a Fortnight.

Benzoin, Benzoinum, Offic. Benzoinum, Offic. C. B. Pin. Benzoinum, cujus arbor folio citri, J. B. The Benjamin Tree. This grows in the *East-Indies* to a considerable Height and Thickness, and bears long Leaves like those of the Citron and Lemon-trees, tho' smaller, and not so green. The Gum produced by this Tree, commonly known by the Name of Benzoin, is a resinous inflammable Substance, sometimes of a reddish, sometimes of a pale Colour, and generally very foul. When it is covered with white Spots it is called *Benzoinum Amygdaloides*. It is of an agreeable Taste, a little acrid, and is much used in Perfumes. It is brought us from the *Philippine Islands, Siam, and Sumatra*. The Druggists, according to *Savary*, keep two Kinds of Benzoin, that in Tears as it is called, and another Sort. The true Benzoin, which was brought into *France* by the Ambassador of *Siam's* Retinue, was externally of a yellowish gold Colour, but white internally, with small clear white and red Veins distributed thro' it. It was friable and without any Taste, but of a very agreeable, and highly aromatic Smell. It differed very much from that Benzoin in Tears, which is commonly sold, and which is of a clear transparent Mass, of a reddish Colour, and mixed with whitish Tears, resembling Almonds, for

which Reason it is called *Amygdaloide Benzoin*. This last Species ought to be chosen with Qualities as much approaching to the former as possible, and it ought above all Things to be pure and free from Dregs, a Property with which it is very rarely to be found. The other Sorts of Benzoin is the most common of all, and very often counterfeited by a Fusion of several Gums together. The best of this Kind is pure, of an agreeable Smell, resinous, and intermixed with a great many whitish Tears, that which is black, and without any Smell, is absolutely to be rejected. According to *Geoffroy*, Benzoin is very proper in *Asthmas*, to attenuate the Phlegm which oppresses the Lungs, and deterge and cure pulmonary Ulcers; but the Flowers of Benzoin are preferred for internal Use. Most Authors seem to agree that this Gum is of a warming, drying, discussing, dissolving and purifying Nature, resists Putrefaction, is good against Diseases of the Breast and Lungs and cures Oppressions of the Thorax. *Amatus Lusitanus* informs us, that he cured an obstinate and inveterate Cough, by Means of the Flowers of Benzoin, and those of Sulphur. *Fabricius Bartoletus lib. 5. de Dyspnea, cap. 1.* says a great deal concerning its Efficacy in Disorders of the Breast and Defects of Respiration, and calls it the Balm of the Lungs. But *Marcus Bannier*, in *Controvers. medico miscellan. Dec. 4. Thes. 7.* endeavours to demonstrate the contrary, and asserts, that the Flowers are prejudicial in a Phthisis and other Disorders of the Lungs. Externally it is used in all fragrant Compositions; for it proves cordial by its agreeable Smell, fortifies the Senses by its Steam, dries up the cold Humours of the *Cerebellum*, dissipates Defluxions, and cures Tooth-achs; however in burning Benzoin,

we ought to take care not to swallow a great Deal of the Smoke, because it not only quickly affects the *Cerebellum*, but also acts with such Force upon the Breast and Lungs, that it is apt to destroy Respiration. It is an Ingredient in the *Balsamum Traumaticum*, and *Elixir Paregoricum*.

Barberis, *Oxyacantha*, Galen, Offic. *Barberis Dumetorum*, C. B. Pin. Boerhaav. Ind. Alt. The *Barberry* or *Pipperidge-bush*. It flowers in *April* and *May*, and the Berries are ripe in *September*. The inner Bark, the Berries and the Seeds are used. The first is opening and attenuating, and is accounted a Specific against the Yellow Jaundice, taken either by way of Infusion or Decoction. The Fruit is very cooling and restringent, and good to moisten the Mouth and extinguish Thirst in burning Fevers. The Conserve is beneficial in all Kinds of Fluxes, and the Yellow Jaundice. The Seeds are binding and astringent, tho' they are but rarely used.

Beta alba, Offic. Ger. Emac. White-Beet. The Root, Leaves, and Seed are used in Medicine, which are somewhat nitrous, and loosen the Belly. It is sometimes employed in Errhines and Clysters. The Beet is one of the five emollient Herbs.

Beta rubra, Offic. Ger. Emac. Red Beet. Its Virtues and Uses are the same with the *Beta alba*. A Decoction of this, together with Lentils, is sometimes used to check a Diarrhæa.

Betle, Offic. *Betre*, *Betlo*, *Betele*, five *Betle*. Park. Theat. *Betle*. It grows in all the Provinces of the *Indies* on the Sea Coast. It strengthens the Gums, corroborates the Heart and Stomach, and Brain; if chewed in the Morning, immediately after Breakfast, it renders the Breath agreeable, but blackens the

Teeth; and according to *Bontius* not only corrodes, but makes them fall out. In the Morning, the Afternoon, the Evening, and the Night time, the *Indians* chew the *Betle*, and carry it continually about in their Hands; but they do not use it alone upon Account of its Bitterness, but wrap up the *Indian Nut*, and a little Lime, made of calcined Shells in the Leaf of the *Betle*, which they affirm to be a Mixture of a very grateful Taste. Others mix *Lycium* with the *Betle*. The Rich and Opulent use it with Camphire of *Borneo*, and some others with Aloes Wood, Musk, and Ambergrease.

Betonica, Offic. Ger. Emac. Wood Betony. Betony grows in Woods and Thickets, and by Hedge-sides, and flowers in *May* and *June*. The Leaves and Flowers are used. The Leaves of this Plant have an herby Taste, and a little saltish and aromatic, and give no Tincture of red to blue Paper. The Flowers and Roots, which are very bitter, stain it very little. Betony is full of Sulphur, mixed with a little oily, volatile Salt, and Earth. By the chymical Analysis, it affords a great deal of Oil, a little Earth, and fixed Salt; no concreted volatile Salt, but a little urinous Spirit. Betony is aperitive, diuretic, sweetening, good for the Diseases of the Brain, and lower Belly; a Tea of the Leaves is good for the Vapours, Sciatica, Gout, Pains in the Head, Jaundice and Palsy: The Ptisan of its Leaves, a cold Infusion of them in Water, the Conserve of its Flowers, the Syrup of the Flowers and Leaves, and the Juice and Extract of these Parts, have the same Virtues: They promote Expectoration and bring away purulent Matter; they consolidate internal Ulcers, and remove Obstructions in the Bowels: The Roots purge both upwards and downwards. A Decoction of *Herniaria*

maria and Betony is commended for the Stone in the Kidneys and Bladder. Others advise a Decoction of Betony to stop an immoderate Flux of the Lochia. The Surgeons mix it in their Cephalic Cataplasms. They make a Plaister of the Leaves for Wounds, especially those of the Head.

Betula, Offic. Ger. Emac. The Birch-tree. It grows in woody Places in several Places in England. The Leaves, Bark, and Tears obtain'd from a Perforation made in the Trunk of the Tree, in the Spring of the Year, are us'd. The Leaves which are bitter, are heating, attenuating, drying, abstergent, resolvent, aperient, and fit for evacuating Serum; for which Reason they are of singular Service in Dropfies and the Itch. As the Bark is of a bituminous Quality, it is heating, emollient, and proper for Fumigations destin'd to correct a bad Air. The Tears are recommended for diminishing Stones of the Kidneys, and Bladder, and for removing Spots of the Skin. A Wine is made of the Sap or Juice of the Birch, which is recommended for the Gravel and Stone.

Bidens, Offic. *Eupatorium aquaticum fœmina*, Ger. Emac. Water Hemp Agrimony. It grows in watery Places, and flowers in August. The Herb is in Use, which is esteem'd Hepatic and Vulnerary.

Bislingua, *Hippoglossum*, *Uvularia*, Offic. *Hippoglossum mas & fœmina*, Ger. Emac. Double Tongue. This Plant is commonly cultivated in the Gardens of Botanists, and is said to be of a vulnerary Quality.

Bistorta, Offic. Ger. Emac. Bistort or Snakeweed. It grows in several moist Meadows, and flowers in May. The Root is mostly used in the Shops, and is of a heating, astringent Quality, especially in Dysenteries, bloody Fluxes, Dysente-

ric Exulcerations of the Intestines, and Vomitings of Blood. It cures an excessive Flux of the Menfes and Hæmorrhoids, and removes violent Vomitings. It quenches Thirst. The principal Way of using it is to mix it with other proper Herbs, for the Cure of the Dropsy. It is affirm'd, that it kills Worms in the Intestines. It is used in Defluxions, and Pains of the Head, malignant Fevers, Small-pox, Measles, and the Plague. It proves a Check to the too violent Ebullition of the Blood, and prevents the overheating of its more spirituous Parts. It prevents Miscarriages, and cures Wounds and Ruptures. And when any Vessel in the Abdomen is broken, it is often made an Ingredient in vulnerary Drinks. The Root powder'd, and thrown into recent Wounds, stops the Effusion of Blood, and cures them. A Decoction of the Root, also, with Wine and Vinegar, stops immediately the most violent Effusions of Blood from Wounds, if wash'd with it. Some take two Parts of the Root reduc'd to Powder, and one Part of quick Lime, and mix them with Wine and Vinegar, and after having evaporated the Humidity, use the Powder which remains in the Vessel, for curing the Cancer. The Root mix'd with some Water proper for Disorders of the Mouth, cures Tooth-achs, fixes loose Teeth, and hardens the Gums, by preventing a Fluxion of Humours to them. Some distill a Water from the Root, Leaves, and Flowers. Other prepare a Syrup from the Root; which they call *Syrupus Colubrinus*. Both these Medicines are accounted excellent against the Plague, Dysentery, Fluxes, Vomitings of Blood, immoderate Discharges of the Menfes, and Vomitings. The Water cleanses and heals all old Ulcers and Cancers, if they are wash'd with it, and some of the Powder of the Root

is sprinkled upon them. It is confidently affirmed, that it banishes all Insects from a House. It is an Ingredient in the *Species e Scordio sine Opio*.

Blitum album, Offic. Ger. Emac. White Blite. It is planted in Gardens, and flowers in *July*. The Leaves, which are only used, and but seldom, are cooling and emollient; and are sometimes put into Clysters. The Seeds are good in Dysenteries, and immoderate Fluxes of the Menfes, and according to *Tabernæmontanus*, the Seeds of it are boiled like Millet in *Silesia*, and afford the common People a grateful Food. The Juice of the Herb express'd, cures Corns in the Feet, if applied to them. A Fumigation of the Herb promotes the Menfes, when stopp'd; and expels false Conceptions, and the Secundines. According to *Casp. Schwenkf. in Catal. Stirp.* the Country People use it as a Remedy against Hemorrhages in their Cattle: And *Tabernæmontanus* informs us, that its Juice, exhibited in Wine, cures the Bites of Scorpions and Spiders.

Blitum rubrum, Offic. Ger. Emac. Red Blites. The Virtues of this are much the same as those of the preceeding.

Boletus, Offic. *Tubera Cervina*, Park. Deers Balls. These are digged out of the Earth, and the whole of them are used, which are as large as a Walnut. It is rarely used, tho' some recommend it as a powerful Stimulus to Venery, and a Medicine very proper for increasing Milk. Its external Use is recommended in hysteric Disorders, and hard Labours.

Bombax, Offic. *Gossipium sive Xylon*, Ger. Emac. The Cotton Bush. It is cultivated in *Greece, Turkey, Sicily, and Malta*; and flowers in *June*. In the Shops the Seeds and Wool of this Shrub are used. The Wool burn'd, and reduc'd to

Powder, stops the Effusion of Blood from Wounds, if put into them. The Seeds are good for Disorders of the Kidneys and Liver, but prejudicial to the Head and Stomach. They are also esteemed excellent for those who are afflicted with a Cough, or Difficulty of Breathing. They are good for the Stone, yield a wholesome Nourishment, strengthen the Constitution, and cure the Dysentery; for by their lenitive Quality, they obtund the acrid and exulcerating Humours. The Oil expressed from the Seeds removes Spots of the Skin, and cures running Sores of the Head. In *Egypt*, according to *Prosper Alpinus*, they extract a Mucilage from the Seeds, just as they do from those of Fleabane and Quinces, which is of Use in burning Fevers, and corrosive Coughs. They, also, restrain all immoderate Fluxes of the Menfes. The Inhabitants of *Malta* fatten their Cattle with the Seeds of this Herb, which have a Taste resembling that of an Acorn.

Bonduch, Offic. *Arbor spinosa Indica, muricatis siliquis*, Park. Theat. *Lobus Echinatus*, Ger. Emac. Molucco Nuts, Marfao, Bezoar Nuts. It grows to a Man's Height, and is a Native of both *Indies*; the Parts in Use are the round Beans, which are of an Ash-Colour, white on the Inside, extremely bitter, and tasteless. They are good in Hernias, discuss Flatulencies, ease the Colic, comfort a weak Stomach, provoke the Menfes, and expel the Stone.

Bonus Henricus, Tota Bona, Mercurialis, Offic. Ger. Emac. *Lapathum unguosum, sive Bonus Henricus*, Park. *English Mercury*. It grows in waste Places, and among Rubbish, and flowers in the Spring. It is of a deterfivè cleansing Quality. The young Shoots, before they come to Seed, boiled as Spinage or Asparagus, are pleasant to the Palate, cooling, soluble, and good for the Scurvy,

Scurvy, and a Provoker of Urine. It is used in Clysters, and the Leaves made into a Cataplasim alleviate the Gout.

Borago, Offic. *Borago Hortensis*, Ger. Emac. Borrage. It grows in Gardens, flowering in June and July. The Root, Herb, and Flowers are used, and are esteem'd Cordial. It is said to fortify the Heart, to cure Fainting, to relieve Melancholy, and to depurate the Blood. *Boerhaave* commends the express'd Juice, in all inflammatory Diseases, as the Gout, Phrenitis, Paraphrenitis, and Peripneumony. The Flowers are one of the four cordial Flowers.

Botrys, Offic. Ger. Emac. *Chenopodium Ambrosioides folio sinuato*, Boerh. Ind. A. Oak of Jerusalem. It grows by the Sides of Precipices, and Banks of Torrents. This Herb is of a bitter Taste, and of a strong, but not disagreeable Smell. It is of a heating, drying, dissolving, opening, cleansing, and purgative Nature. It resists Putrefaction, and is singularly efficacious in Oppressions, Coughs, and all cold Disorders of the Breast, and Difficulties of Breathing. It is also very effectual, for dissipating viscid Matter lodged in the Thorax. It opens Obstructions of the Liver, Kidneys, and Matrix; cures the Jaundice, prevents Dropsies, promotes a Discharge of the Menfes and Lochia, and cures Pains of the Uterus and Belly. The Venetian Women find the Botrys to be a sure and infallible Remedy against hystERIC Fits, both used internally and externally. Fumigations of the Herb itself, are excellent for provoking the Menfes, and expelling dead Fœtuses: The Leaves dried, reduced to Powder, and mix'd with Honey, are excellent for Vomitings of Blood, and Disorders or Ulcers of the Lungs. *Matthioli* informs us, that by this Medicine, he cured Patients, who

had spit up Pieces of their Lungs. A Decoction of the Botrys, with Syrup of Violets, is recommended, as good for Abscesses, by *J. Hearn*. L. 2. *Metb ad Prax.* C. 8. In the foreign Shops there is a Conserve made of the young Leaves, and a Water distill'd from the whole Plant when it flowers: Both these are very good Medicines in Oppressions of the Breast, and in Pains of the Belly. A Lohoch of the Botrys is recommended as an excellent Medicine for all Disorders of the Breast, by *P. Forestus* and others; and the Syrupus *Diabotrys* is said to be an excellent Medicine for those who are phthical. The Herb itself, boil'd in any Lixivium, kills Vermin, and carries off other Sordes of the Head, if wash'd with it. *Tabernæmontanus* informs us, that the Seeds of this Herb, if sown with Corn, kill the little Worms which prove so hurtful to it.

Another Species of the Botrys is the Botrys Mexicana, Cod. Med. *Chenopodium Ambrosioides Mexicanum*, Boerh. Ind. A. Mexico Thea. This is only found in Europe in the Gardens of the Curious. The Herb and its Root are in Use; both which are said to corroborate the Stomach, and to relieve in Asthma's and Obstructions. A Decoction of the Root restrains Dysenteries, discusses Inflammations, and is said to be disagreeable to poisonous Animals, and therefore to keep them at a Distance.

Brasilia, Offic. Arbor Brasilia, Park. Theat. Brasil-wood. It is cold and dry, mitigates the Heat of Fevers, and is a Restricting and Strengthening, like the Wood of Sanders.

Brassica. Cabbage. A celebrated Plant among the Antients, and much in Use among the Moderns, upon which *Chrysippus* wrote a whole Volume, and *Dionysius* another. *Pathagoras* and *Cato* bestow'd

great Encomiums on the Virtues of Cabbage.

There are several Species of Cabbage, the First of which is the *Brassica sativa*, *Caulis*, Offic. *Brassica capitata alba*, Ger. Emac. Boerh. Ind. A. White Cabbage, and Coleworts. This Sort of Cabbage is justly it is said preferable to other Pot Herbs, since, both raw and boil'd, it is possess'd of such salutary Qualities, as to prevent Occasions for the Medicines used in the Shops. For this Reason, when a certain foreign Physician came into *Denmark* with a Design to settle, and saw the Gardens of the Country People so well stock'd with Cabbage, he, with good Reason, prognosticated small Encouragement for himself in that Part of the World. It keeps the Belly in an easy and soluble State, and a Decoction of the Tops of its tender Shoots, discharges such an incredible Quantity of Bile and Phlegm, that no Medicine proves a quicker, a safer, or a more efficacious Purge, Hellebore and Scammony not excepted. The Juice of Cabbage is of such a Nature as not only to afford a sufficient Supply of Nourishment to the Body, but also to correct the acrid Salts of the Juices, allay the Acrimony of the Blood, cleanse the Intestines, and scour the Kidneys. For this Reason, Cabbage is highly salutary in Disorders of the Breat. A Decoction of Cabbage, with an Addition of Raisins, is used by Preachers and Pleaders, in Hoarseness, and Defects of Voice, arising from too long speaking. Its Juice is an excellent Remedy for the Scurvy. *Konigius* tells us of a dropical Patient, who after despairing of Relief from the Physicians, was cured by a Quack, by Cabbage infused in Wine, with proper Correctors. This Plant, a little boil'd, with some Lemon Juice, and new Butter, is an excellent Remedy in phthisical and hectic

Disorders. Where Urine is to be provoked, or the Body render'd soluble, it, by its stimulating muriatic Acid, proves effectual, with such as are not accusom'd to take Physic. Many People use pickled Cabbage for dissipating the Remains of a Debauch. It has been observed, that the Pickle of Cabbage, plentifully drank, has remov'd continued Fevers, cured Dropsies, and remov'd the most obstinate Tertian Agues. When the Peasants of *Croatia* are seiz'd with Fevers, they successfully apply Cataplasms of pickled Cabbage, to their Foreheads. The Pickle of Cabbage, is good in Burns, Gangrenes, and the Beginnings of Inflammations in the Fauces, where the Intension is to refrigerate and repel. Nor is unpickled Cabbage less useful for various external Purposes; since it refrigerates, repels, opens, and deterges. After Vesicatories are taken off, 'tis usual to apply the Leaves of Cabbage anointed with Butter, which ought to be removed every two Hours. *Etmuller* says, they may very properly be laid on Issues, in order to carry on the Discharge of the Matter, and prevent Consolidation. Nurses apply the Leaves of Cabbage, to their Breasts, to prevent Coagulations of their Milk, and prevent it from being accumulated in too large a Quantity. Some apply them to Abscesses of the Breast, to hinder Inflammations, and promote the Consolidation of the Ulcer. Country People, to cleanse Wounds and Ulcers, pour the Juice of Cabbage into them, or apply its Leaves bruised to them. In pestilential Disorders, the Leaves, anointed with Rape Oil, are successfully applied, for the Maturation of Ulcers and Carbuncles. A Cataplasim of the Leaves with Butter, maturates and breaks Imposthumations. Warts have been taken off the Hands, by anointing them with the Juice of Cab.

Cabbage. The Leaves with Salt, applied to the Soles of the Feet, allay feverish Heats.

The second Sort is the *Brassica capitata rubra*, Offic. Ger. Emac. Red Cabbage. This Sort of Cabbage, is possess'd of a medicinal Quality; and abounds with a Juice, which, by its nitrous, sweet, emollient, laxative, aperitive, attenuating, and stimulating Qualities, promotes those Excretions, which are absolutely necessary to the Preservation of Health. For this Reason it is not only a Preservative against Diseases, especially of the Chronical Kind, but also contributes very considerably to their Cure. In the Shoots of this Sort of Cabbage, cut Longitudinally, when the Autumn is pretty far advanced, there is a Juice whose Taste resembles that of Honey or Manna, which flows from them when laid in a cool Place for sometime, and which is said to be of a purgative Quality. The red Cabbage is preferable to the white, in Cases where the Body is afflicted with Ulcers; since, in such Constitutions, the white soon assumes a putrid Quality, and becomes fetid. Some use red Cabbage-leaves, by Way of Plaister, in inflamed Wounds, and itchy Ulcers. When the Achors of Children are repell'd, the Leaves of the red Cabbage, apply'd to them, never fail to make the Discharge of the Matter return.

Another Sort of Cabbage is the *Caulis rubra*, Offic. *Brassica rubra*, Ger. Emac. Red Coleworts. This Plant is cultivated in Gardens, and its Leaves only are in Use, a Decoc-tion of which, sweeten'd with Sugar, is a celebrated Remedy in Asthma's.

A fourth Sort of Cabbage is the *Brassica sabauda*, Offic. Ger. Emac. Savoy Cabbage. This Sort of Cabbage is cultivated for the Kitchen in the Gardens of England. It

is very delicate and tender, for which Reason, it is much sought after, by those who have nice Palates, and are acquainted with its agreeable Taste.

The fifth Sort of Cabbage is the *Brassica florida*, Offic. Park. Theat. The Colliflower. This Species of Cabbage is cultivated in Gardens, and is much used in the Kitchens. In Conjunction with other proper Ingredients, they add it to Pyes and Sauces, which are very agreeable both to the Sick and the Healthy.

The sixth is the *Brassica Gongylo-des*. The Turnep Cabbage. The Seeds of this Cabbage, yield an Oil by Expression, very proper for Lamps, and for the Purposes of those concern'd in the woolen Manufacture.

The seventh is the *Brassica fimbriata*. The Boor-Cole. Its Seeds are of a blakish-Colour, an acrid aromatic Taste, and of a Smell sufficiently grateful, tho' not strong. Both for Food and Medicine, it is not inferior to the red Cabbage. The *Italians* put the young Tops of this Cabbage, into their Sallads, to render the Body soluble and provoke Urine. The black Seeds of this Cabbage are possess'd of an anthelmintic Quality; and when bruised, with Sugar, invigorate the Organs of Speech, and render the Voice clear, strong and sonorous.

The eighth is the *Brassica campestris perfoliata*, flore albo, Perfoliated wild Cabbage, with a white Flower. It grows spontaneously in several Countries, flowering in Summer, it is possessed of singular, if not more powerful Qualities, than the other Species of Cabbage; for which Reason it is by some called *Brassica rustica*, but is not used as Food. *Cato* affirms, that the Powder of the dried Plant, made into an Errhine, and taken up the Nose, cures all Defects, and amends the

ill Scent therein. *Chrysippus* recommended it for Inflammations, and melancholic Disorders; also for recent Wounds, being applied with Honey, and not taken off before the seventh Day: Bruised in Water, he orders it for strumous Swellings. Others say, it checks the Progress of spreading Ulcers, consumes Excrescences, and smoothes the Skin from Scars; being chewed it heals Ulcers of the Mouth, and Affections of the Tonfils; three Parts of it, mixed with two Parts of Alum, in Vinegar, cure the *Psora*, and inveterate *Lepra*, if anointed therewith. *Epicharmus* said, an Application of it was a sufficient Cure for the Bite of a mad Dog; but it is more effectual with Lafer and strong Vinegar. The Seed roasted, is a Remedy against the Venom of Serpents, and the poisonous Effects of Mushrooms, and Bull's Blood. The boil'd Leaves are good in Disorders of the Spleen. The Ashes of the Root, cure a Swelling of the Uvula, by touching it; and, made into a Linctus, with Honey, repress the Parotides, and heal the Bites of Serpents.

The ninth is the *Brassica campestris perfoliata, flore purpureo*. Perfoliated wild Cabbage, with a purple Flower. Its Seeds, Root, and medicinal Virtues agree with the former.

Brassica marina Soldanella, Offic. *Soldanella marina*, Ger. Emac. *Scotisch* Scurvy-grass. It is produc'd in the most sandy Parts of the Sea Coast, in the North of England, and flowers in June. The whole Herb is in Use, and as it is excellently calculated for discharging Water, it contributes very much to the Cure of Dropsies and Scurvies. It is likewise given in rheumatic Cases. It works very roughly, and very much disorders the Stomach.

Britannica Antiquorum vera, sive Lapatium longifolium nigrum palustre, Munt. Herb. Brit. *Hydrolapathum*, Offic. *Lapatium aquaticum folio cubitali*, Boerh. Ind. A. Great Water Dock. *Muntingius* wrote a whole Treatise on the Subject of this Plant, in Quarto, and endeavours to prove this to be the true and genuine *Britannica* of the Antients. When *Germanicus Caesar* had removed his Camp beyond the Rhine in Germany, they had only one Spring of fresh Water in that maritime Tract of Land, by drinking of which, within the Space of two Years, their Teeth fell out of their Heads, and the Joints of their Knees were enfeebled and relaxed. The Physicians call'd these Disorders *Stomacace* and *Scelotyrbæ*. There was a Remedy at length discover'd, which was the Herb *Britannica*, a most salutary Medicine, not only to the Nerves, and in Diseases of the Mouth, but also against an Angina, and the Poison of Serpents. This we learn from *Pliny*. The *Britannica* has a thick, round, broad, juicy Root, spongy when old, about a Hand's Breadth in Length, divided below into several thick Parts, and surrounded with little fibrous Roots; the Colour of it, when fresh taken out of the Earth, is black on the Outside, and White within, but soon alters into a reddish Yellow, like that of the true *Rhubarb*; and the Root, when dry, turns quite Brown. It has but few Leaves, but they are the longest of all other Kinds of Docks, situated near to one another, and separate, pointing upwards, of about two Foot long, in Breadth three or four Fingers, being widest in the Middle, ending in a sharp Point, of a deep Green, or sky Colour, of a dark Green above but paler underneath, with pale Green Fibres, of a pretty thick,

thick, close, hard, dense, firm Substance, the Edges a little curl'd, standing on Pedicles of a moderate Length and Thickness, sometimes red near the Ground. They have an Astringency, with something of an Acidity, falling off towards the End of *August*. The Stalk is single, or multiply'd, according to the Age or Bigness of the Plant, two, three, sometimes four Feet in Length, strait, round, green, hollow, adorned on both Sides, with lesser Leaves, which bend a little upwards as well as downwards, from whose Axæ, proceed little Sprigs, with little, short, and tender pendulous Leaves, and pale Flowers, which open towards the End of *July*, and are thinly dispos'd about the Joints, but not in the Manner of Whorles. The three outer Petals of the Flower are conspicuous on both Sides for two hairy pale-whitish Gemmules; but these are observ'd in no Species of the *Lapathum*, but the *Virginian Britannica*. The Seed is small, angular, and of a spadiceous Colour. Every Part of this Herb, as the Stalks, Leaves, Flowers, and Seeds, but especially the Roots are powerfully astringent, consolidating, and conglutinating; for which Reason it restrains and heals all Sorts of Putrefaction, as the Erysipelas, Herpes, Phagedenic Ulcers and Gangrenes. It stops Hæmorrhages, as also the Hæmorrhoids and Meneses, and is effectual for all those Purposes, in which other cold Astringents are requir'd. It cures all Manner of Diseases of the Nerves, as Twitchings, Contractions, Tremblings, Convulsions, Palsies, febrile Heats, or Rigors. It banishes away Serpents and other venomous Animals, and cures their Bites; for which Reason it is reckon'd among the Alexipharmics; it is good for all Species of the Angina, Relaxation of the Uvula, Swelling

of the Tonfils, and other like Diseases of the Mouth, Fauces and Stomach, which require Astringents; as also Abscesses, Tumours and Ulcers. It removes various Sorts of Defluxions, and lastly, Diseases which proceed from hidden Causes, as the *Stomacace*, the *Scelotyrbe*, (the Scurvy affecting the Mouth and Legs) and Ulcers in the Legs. The green Leaves, are apply'd to ulcerated Parts, for twelve Hours, and then changed; the Juice also harden'd by the Dog-day's Sun, or inspissated by the Fire, is used to anoint the Sore. The Leaves of the *Britannica* are styptic, a little bitter, and give a deep Tincture of Red to the blue Paper. The Root gives it a little fainter; it also is very styptic and bitter. Its Bark is thick, of a flesh Colour, streaked; its Heart is soft, and of a pale Yellow. It is probable, that the Salt of this Plant may be compos'd of Alum and Sal Ammoniac, mix'd with a great deal of fetid Oil. I believe this Plant is very effectual in scorbutic Symptoms; and am convinc'd by Experience, that it will effectually cure Bleeding of the Gums, if chew'd in a Morning.

Briza, Offic. *Zea monacoccos*, five simplex, five *Briza*, Park. Theat. *Hordeum distichium*, spica nitida, *Zea seu Briza nuncupatum*, Boerh. Ind. A. St. Peter's Corn. It is cultivated in Germany; and the Seed is used, which agrees in Virtue with the *Zea*, or *Spelta*.

Bromus, Offic. *Bromus Herba seu Avena sterilis*, Park. Theat. Drank or Wild Oat Grass. This is a Plant much like the *Ægilops*, being of a drying Quality. It is recommended for the Worms in Children.

Bruscus Ruscus, Offic. Ger. Emac. Butcher's Broom. This Plant grows in Hedges, and Thickets, flowering in Summer. The Root is

one of the five opening Roots, good to remove Obstructions of the Bowels, and to evacuate by Urine. It is prescribed in Broths, Pizans, and Apozems for the Dropsy, Cachexy, Jaundice, Stone, and Retention of Urine. A Pint of White Wine, in which a Dram of the Powder of the Root of Butcher's Broom, with the same Quantity of those of Figwort and Dropwort have been infused, is recommended for scrophulous Tumours.

Bryonia, Bryony. There are two Sorts of Bryony us'd in the Shops, the first of which is the *Bryonia alba*, Offic. Ger. Emac. *Vitis alba vel Bryonia*, J. B. White Bryony. It is found in Lanes, and by Hedge Sides, it flowers in May, and the Berries are ripe in September. The Root of this Plant is the only Part now used in Medicine, and all Authors are sufficiently agreed, that it is highly acrimonious and nauseous, provokes Urine, purges violently, and vomits briskly. The Dose of the Root, reduc'd to Powder, is from two Scruples, to one Dram; but when it is intended for internal Purposes, its drastic Qualities ought to be corrected, by the Addition of a proper Quantity of Cream of Tartar. Since, therefore, this Root when us'd internally, acts by its stimulating and resolvent Acrimony; 'tis sufficiently obvious, that it may be properly exhibited in Cases, where heating Medicines are indicated, and when the Intention is to stimulate the Nerves strongly, and give a Kind of Concussion to the whole System. To this Quality it is also owing, that it is so much extoll'd in intermitting Fevers, in provoking the Menfes, curing those uterine Disorders to which young Women are subject, and in killing and expelling Worms lodg'd in the Intestines; for being possess'd of an highly drastic Vir-

tue, it powerfully incides the tenacious Juices, and surprisngly removes Obstructions. Thus Mr. Ray informs us, that the Bulk of a Nutmeg, of the Conserve made of its Root, taken twice a Day, and persisted in for a long Time, often proves the happy Means of removing and entirely curing epileptic and hysteric Passions; and that the same happy Effect is produc'd, by continually putting a Piece of its Root, into the Cup out of which the Patient drinks. *Forésius* from *Avicenna*, informs us, that Patients render'd delirious, by dangerous Wounds, are in a great Measure restor'd either by drinking Briony Root, for some Days, in some refrigerating and diluting Liquor, or using it in any proper Food, capable of obtunding and blunting its Taste. The Root, externally applied, has in many Cases, given incontestable Proofs of its resolvent Qualities. Thus when newly bruise'd, and mix'd up with Salt and Vinegar, it resolves cold Tumors, and removes the discolour'd Marks arising from extravasated Blood, if applied to them. According to *Etmuller*, Briony Root, not only cures the Dropsy, when exhibited internally, but also evacuates the Waters collected in the Abdomen, when applied externally by Way of Cataplasim, to the Region of the Loins, either bruise'd by itself, or made up with Cows, Goats, or Pigeon's Dung. It is also applied to cedematous Swellings of the Feet and Legs, an Hydrocele of the Scrotum, and other Disorders of a similar Nature; in which Cases it carries off the Serum, and consequently discusses the Swellings. It is also properly applied to scrophulous Tumours, whether ulcerated or otherwise. If the Root of the white Briony is excavated in the Ground, and duely cover'd up, the Liquor collected in it proves

an excellent Medicine for arthritic Pains, if applied immediately to the Parts affected. The Root itself also, fresh bruised, mixed up with Linseed Oil, and applied warm, removes sciatic and arthritic Pains. This Medicine is to be repeated till the morbid Matter is resolv'd and dissipated. *Etmuller* informs us, that when the Uterus is to be purg'd, white Briony Root may either be used as an uterine Pessary, or by Way of Fumigation. As too violent Effects are to be dreaded from Briony Root in Substance, *Mr. Boulduc* in *Hist. Acad. Roy. des Sciences, An. 1712.* thinks it more safe to have Recourse to Infusions, Decoctions, and Extracts of it. He also prefers Infusions to Decoctions of it, and approves more of infusing it in Wine than in Water: When the only Intention is to discharge the Waters from the Abdomen, he maintains that Extracts from its Juice, are preferable to those obtain'd by Infusion or Decoction. Some think that an Ounce of the *Fæcula Bryonia*, or Powder which subsides in the express'd Juice of its Root, is a safer Medicine than the Root itself; but it is an ineffectual Preparation, unless assisted with Chalybeates, since according to *Etmuller* it is no more than a dead Calx.

Bryonia nigra, Offic. Ger. *Bryonia Sylvestris nigra*, Park. *Tamnus racemosa, flore minore luteo pallescente* Boerhaav. Ind. Alt. Black Briony. It flowers in June, and is found in the same Places with the white Briony. According to *Dioscorides*, the Shoots of the first Budding, are eaten as other Greens, provoke the Menfes, and are good for epileptic, vertiginous, and paralytic Patients. *Ray* informs us, that its Root incises and attenuates viscid Phlegm, especially in Disorders of the Thorax. *Lobelius* asserts, that it pro-

vokes Urine and the Menfes, and discharges Sand from the Kidneys, if drank in a proper Liquor. But *Gesner* affirms, that it is possess'd of very drastic Qualities, and is said to contain something of a poisonous Nature, for which Reason, it is improperly us'd instead of the white Briony.

Buglossum, Offic. *Buglossum angustifolium majus*, Boerh. Ind. Alt. Bugloss. It is planted in Gardens, flowering in June and July. The Leaves, Flowers, and Root are used. The Roots are very glutinous, and give a deep Tincture of Red to the blue Paper; the Flowers give it but very little, and the Leaves scarce any at all. So that probably, the Sal Ammoniac in this Plant is involved in a glutinous Juice, in which the Earth and Sulphur predominate. *Bugloss* moistens, cools, and gives Relief to melancholic Persons; it is good to dissipate the Defluxions of the Breast, and an obstinate Cough. This Plant cools no otherwise than by restoring the Motion of the Blood which stagnates, and heats the Parts wherein its Circulation is retarded.

Buglossum Sylvestre, Offic. *Buglossum sylvestre minus*, Park. Theat. Boerh. Ind. A. Wild Bugloss. It grows by Hedges and among Corn, flowering in May. It is but seldom used, tho' it is reckon'd to have the same Virtues with the former, but in a milder Degree, and for the Want of that, this may supply its Place.

Another Sort of this Plant is the *Buglossum latifolium sempervirens*, B. *Borrage sempervirens*. Ever-green Borrage. It is said to be possess'd of an astringent Quality, which is stronger in the Roots than in the Leaves, and if drank in Wine stops Fluxes.

Bugula, & *Consolida media*, Offic. Ger. Emac. Boerh. Ind. A. *Bugula vul-*

vulgaris, flore cærulea, Park. Theat. Bugle. It grows in Woods and Hedges, flowering in May. On Account of its abstergent Qualities, it is accounted an excellent Vulnerary. In Consequence of its abstergent Virtue, it is also said to be a present Remedy in spreading Aphthæ, and Ulcers of the Mouth: And that an Ointment made of the Leaves of Bugle, Scabious and Sanicle, bruised, boiled in Lard till they become dry, and then express'd, is excellent for the Cure of all Ulcers, Contusions, and Wounds. *Konig* affirms, he has known it to heal scrophulous Ulcers in the Neck. From what has been advanc'd, we may easily perceive the Reason, why this Plant is said to be diuretic, and why it is recommended in Spittings of Blood, Dysenteries, and the Fluor albus; for when coarse, tenacious and viscid Substances are attenuated, and Obstructions remov'd, in Order to make Way for a free Circulation of the Juices, the E-munctories are not only open'd, but the spasmodic Contractions, which are the immediate Cause of the morbid Fluxions, being remov'd, these Disorders are cur'd. The Herb Bugle is most properly us'd in Decoctions, or its express'd Juice may be us'd, which is highly saponaceous and opening. *Potterius* recommends a Decoction of Bugle, made with Mutton Broth, as an excellent Medicine in a *Phthisis*, and internal Ulcers; affirming, that it gently relaxes the Belly, wonderfully recruits the Liver, and fortifies other Parts. *Etmuller* informs us, that the *Italians* in the Spring, cleanse the Root and Leaves of Bugle, and use them as a Sallad, which is not only grateful to the Palate, but also seems calculated to prevent Cachexies. Its Juice is an excellent Medicine in malignant Ulcers.

Bulbocastanum, Offic. *Bulbocastanum majus & minus*, Ger. Emac. *Nucula terrestris major & minor*. Park. Theat. Earth Nut, Kipper Nut, Pig Nut, and Hawk Nut. It is emollient, and inspissates the Juices, and is often recommended to those, whose Fluids are too thin, and to such as are phthisical, consumptive and extenuated. *Trallian* recommends it for Spitting of Blood. The Seeds of this Plant are of a diuretic Quality. The Root is reckon'd an Incentive to Venery.

Bulbocodium vulgatus, J. B. *Pseudo-Narcissus Anglicus vulgaris*, Park. *Narcissus sylvestris pallidus, calyce luteo*, C. B. Pin. Daffodil. It grows in Fields and Gardens, and in many other Places. The Plant abounds with Oil and essential Salt. The Root is purgative, aperitive, and evacuates viscid Phlegm. The Dose is two Drams in an Infusion: It is hurtful to the Nerves; but outwardly is said to be good for Ambustions, Wounds, and Hernia's. *Herman* says, the bruised Leaves are good for an *Erysipelas*.

Bulbonach, Offic. *Viola lunaris sive Bulbonach*, Ger. *Lunaria major, siliqua rotundior*, Boerh. Ind. A. Sattin or Honesty. It grows spontaneously in several Parts of Germany and Hungary; but is cultivated in Gardens in England. It is of a hot, bitter, and acrimonious Taste. It absterges, heats, and provokes Urine. The Powder of the bitterest Seeds is recommended for the Epilepsy.

Bulbus, Vomitorius, Offic. *Muscari Clusii*, Ger. *Muscari obsoletioris flore ex purpura virente*, Boerh. Ind. A. Musk Grape Flower. It flowers in April; and the Root is us'd, which being chew'd, or drank by Way of Decoction, cures Disorders of the Bladder, and provokes Vomiting.

Buphtalmum, Offic. *Buphtalmum verum*, Ger. Emac. *Cotula flore lacteo radicato*, Tourn. Inst.

Ox-Eye. It grows wild in the North of England, flowering in June, or July. The bruised Flowers with Cerate, discuss œdematous Tumours and Hardnesses, and are recommended for the Yellow Jaundice.

Buphtbalmum Germanicum, Offic.

Buphtbalmum vulgare, Ger. Emac.

Buphtbalmum Tanacetii minoris folio,

Boerh. Ind. A. Common Ox-Eye.

It is reckon'd to be aperitive, vulnerary, and good for a Jaundice, but is seldom met with in our Shops.

Bupleurum, Offic. *Auricula Leporis umbella lutea*, J. B. Hares-Ear. It grows in hilly Places, flowering in July and August. The Herb is used. It is accounted a good Drier, aperitive, and discutient; it expels Urine and Sweat, and deterges Wounds.

Bursa Pastoris, Offic. Ger. Emac. *Bursa Pastoris major vulgaris*, Park. Theat. *Bursa Pastoris major, folio sinuato*, Boerh. Ind. A. Shepherd's Purse. It grows every-where among Rubbish, Banks and Walls, flowering all the Summer. It is of an herby Taste, a little saltish and deterfive. This Plant yields a great deal of concrete volatile Salt, fix'd lixivial Salt, and Earth. These Principles mix'd together, render the *Bursa Pastoris* proper to dissolve the Blood, when it is thicken'd by foreign Acids, which hinder it from passing, with its ordinary Velocity, from the Arteries into the Veins; to which we may refer the greatest Part of Defluxions. Besides, the Earth, which is in this Plant, easily imbibes the Serofities, which occasion a Relaxation of the Fibres; thus, by the Consent of all Authors, it is vulnerary and astringent; it is also believ'd to be febrifuge and lenitive. The Juice of its Leaves drank, from four Ounces to six, is an excellent Re-

medy in all Losses of Blood, and in Defluxions attended with an Inflammation. A Handful of it boil'd in lean Broth, is used in Ptisans, Glysters, and Cataplasms. Its distill'd Water has little or no Virtue. It is also recommended for Head-achs, immoderate Fluxes of the Menfes, Discharges of bloody Urine, Diarrhæas, Dysenteries, Lienteries, and Gonorrhœas.

Butomus, Offic. *Butomus flore roseo*, Boerh. Ind. A. *Juncus floridus*, Park. Theat. *Gladiolus palustris Cordi*, Ger. Emac. Water Gladiolus. It is found in the Channels of Rivers among the Mud, flowering in June; the Herb is only used, and is of an aperient and deobstruent Quality.

Buxus, Offic. Ger. Emac. *Buxus arborescens*, Boerh. Ind. A. The Box Wood. It grows wild, in some Parts of Kent and Surrey. A large Quantity of Box Leaves infused in near a Pint of white Wine, proves, according to Bleguy, an infallible Cure for pituitous and flatulent Colics, if the strain'd Liquor is drank warm. They distil from the Wood an Oil, which is very narcotic, and wonderfully extoll'd in Epilepsies, Tooth-achs, and Rotteneils of the Teeth. A Decoction of the Flowers of Box, is reckon'd sudorific, and 'tis said that one Dram of them proves a violent Purge. *Rondeletius* don't doubt in the least, but, that the Shavings of Box, in Consequence of their sudorific Quality, would cure the venereal Disease, but adds that they are not to be used for that Purpose, because they excite Head-achs. *Amatus Lusitanus*, cured an Hemisrania, by a Decoction of Box Wood, after all other Medicines had proved ineffectual. The Oil distill'd from the Wood, is recommended for Fevers, Vertigoes, the Falling-Sickness, and Hemorrhoids. This

Wood subjected to Distillation, from a Retort in a sand Heat, yields an acid Spirit, and a fetid empyreumatic Oil, which is order'd with melted Butter for Cancers, and with Oil of St. John's Wort is recommended for the Gout and Rheumatism. And if rectified and digested with Spirits of Wine it makes a good Medicine for internal Uses. The Smoak of burnt Box-wood is very much recommended for the Plague. The Leaves are bitter, have an ill Smell, and give a faint red to the blue Paper. Of this is made the *Oleum Buxi*.

Cacalia, Offic. *Cacalia incano folio*, Ger. Strange Coltsfoot. It grows on Hills and in Woods. The Root macerated in Wine, cures Coughs and Roughness of the *Aspera arteria*. The Berries powder'd and made into a Cerate smooth the Skin, and free it from Wrinkles.

Cacao America, five *Aveblana Mexicana*, J. B. *Amygdalis similis Guatimalensis*, C. B. Pin. *Arbor Cacaovera*, Pis. Mant. The Cacao Tree. This grows to be pretty large, and is found in several Parts of the *West-Indies*, tho' those of the best Kind are said to be produc'd in *Coracao*, in *New-Spain*. What renders this Tree very considerable is its bearing the Cacao Nuts, twenty or thirty of which are included in a round Capsula or Pod. These Nuts are externally brown, and as large as an Almond, tho' rounder and thicker. The Juice expressed from the mucilaginous Pulp contain'd in the Husk of these Nuts, resembles Cream, and is possessed of a grateful Taste, and cordial Quality. It is also of a detergent Nature, and when us'd externally, very proper for removing cutaneous Eruptions, and Asperities. The Nuts themselves included in the Husk or Shell, are said to be of so nutritive a Quality, that one Ounce of them con-

tains more real Nourishment, than a whole Pound of Beef. The Cacao Nuts when subjected to a chymical Analysis, besides other Principles, yield a large Quantity of Oil, which is wonderfully pungent and penetrating, especially before it is separated from the volatile Salt, of which it contains a large Quantity. It is also highly aromatic and cordial. A certain Quantity of this Oil, distilled from a Cucurbit by the Heat of Ashes, yields an unctuous Liquor, which concretes as it drops, and is call'd the Butter of Cacao. This Butter, when not rectified, may not only be used with Food as Olive Oil, but is also extoll'd as an highly anodyne Medicine, and proper for correcting the acrimonious Humours, which prove uneasy to the *Aspera Arteria*. Various other Virtues are also ascrib'd to this Butter by practical Authors. But the Circumstance, which of all others renders the Cacao Nut most celebrated, is its being the Basis or principal Ingredient of Chocolate, a factitious Substance first brought from *America* into *Europe* by the *Spaniards*, about the Beginning of the last Century. Some dissolve this Substance in Water, others in Milk, and others in Wine, but Water seems to be of all others the best Vehicle for it, since by its diluting Quality it best promotes the Distribution of its nutritive Principles. Chocolate from its component Parts seems to be principally proper for Persons of cold Constitutions, for old People, for such as have their Strength impair'd by continual Watchings, and for those who travel in cold Mornings. It is, also, by some commended, in Cases where the Digestion is weak, but it is of too oleous and tenacious a Nature to be digested by a weak Stomach; for which Reason *Cheyne*, in his Essay on Health, thinks that it ought not to be used by the weak and infirm, either

ther as an Aliment or Medicine; but owns that it may produce all the salutary Effects of a wholesome Food, in vigorous and robust Constitutions; in which it may also be used as an Anodyne Medicine in Colics and nephritic Pains; since by its Viscidity it sheathes up and blunts, the saline, acrid, and irritating Humours, that thus by the brisk Impetus of the Viscera, they may be discharg'd through proper Passages. It is, also, confirm'd by the Experience of many practical Physicians, that in hectic, scorbutic, and catarrhus Disorders, Atrophies, malignant Itches, and Chin-coughs, Chocolate has prov'd a divine and miraculous Remedy, and that in these Disorders, when other Medicines have been ineffectual, the Physician has been oblig'd to have Recourse to Chocolate, as the last and most effectual Remedy. The celebrated *Hoffman*, in his Consultations, asserts that Chocolate prepar'd with Water, and drank at proper Times, may conduce very much to the Cure of melancholic Disorders, arising from too weak and lax a State of the Nerves, especially if a few Drops of the Essence of Amber are mixed with it. As Chocolate is nutritive, and corrects the Acrimony of the Juices, so we think, Dr. *Stubbs* in *Philosoph. Transf.* was in the Right when he affirm'd, that well-prepar'd Chocolate was an excellent Diet, not only for such as are scorbutic, afflicted with arthritic Pains, or the Stone, for Women in Labour; and for preventing Convulsions, and expelling the Meconium of Children, but also for hypochondriacal and chronical Disorders. A Man in perfect Health, may drink as much Chocolate as he has an Appetite for, provided he finds himself refreshed, and his Stomach not over-loaded by it. But he ought to remain in a State of

Rest for Half an Hour, or an Hour, after he has drank it, lest Concoction and Digestion should be interrupted or irregularly carried on. He ought, also, to abstain from Food, for some Time after he has drank Chocolate, lest by a contrary Practice, he should injure his Stomach; for Chocolate is itself very good Matter of Nourishment. Hence the most proper Time of using it is, when the Concoctions are finish'd, whether in the Morning, or the Afternoon; and since in an hot Air the Powers of Digestion are fainter and more languid than in a cold State of the Atmosphere, 'tis sufficiently obvious, that Chocolate ought to be used in smaller Quantities, and more rarely in Summer than in Winter. The aromatic Ingredients of Chocolate recruit the languid Stomach; but *Caldera* advises, that if during an excessive Heat, the Person who intends to drink Chocolate, is thirsty, he should a little before take a moderate Draught of cold Water, lest the Chocolate should render the Thirst more intense than it was before. The same Author, also, informs us, that any Liquor drank after Chocolate produces terrible Effects. He also tells us, that Chocolate cool'd with Ice or Snow, is equally virulent and dangerous with cold Poisons. When Chocolate is prescribed as a Medicine, the Physician must determine the Quantity, and fix the proper Seasons of Exhibition. Those who are become weak in Consequence of Inanition, may judge of the Quantity from the Sense of Refreshment they feel; but at the same Time, they ought to use it more sparingly than those who are vigorous and robust. Chocolate when moderately used, contributes to the Health of those, who are in no Danger of having their Juices stimulated into too brisk a Motion; or their Constitutions over-heated

ver-heated by the Use of Aromatics. As also of those, whose Stomachs are able to concoct and subdue the pinguious Substance of the Cacao Nuts. Hence 'tis obvious, that those Persons must abstain from the frequent and immoderate Use of Chocolate, who are in the full Vigour of their Youth, whose Juices are easily thrown into preternatural Commotions, who have spare dry Constitutions, and whose *Primæ Viæ*, in Consequence, of having lost their Tone, are unfit for the due Concoction of the Aliments. *Bagliivi* informs us, that in hot and sanguine Constitutions, the immoderate Use of Chocolate, by inspissating the Blood and rendering it less fit for Circulation, produces Inflammations of the Viscera, long mesenteric Fevers and Apoplexies. *Meisner* and *Je ffieu* assert, that Chocolate produces Obstructions, and *Hoffman* asserts, that the more it is drank by hypochondriac Patients, the greater Injury they sustain, since Eructations, Loss of Appetite, Pains, and Uneasiness of the *Præcordia*, are produced by the Inflation and Distension of the Stomach, occasion'd by it. That drinking Chocolate to Excess contributes very much to the Formation of Stones, especially in the Gall-bladder, is sufficiently attested by the Observations of some of the best practical Physicians. On Account of the large Quantity of Sugar which enters the Composition of Chocolate, its Use, and much more its Abuse, ought to be avoided by Women labouring under uterine Disorders, and by those who are subject to hypochondriacal Flatulences. The Disadvantages arising from the Abuse of Chocolate consider'd as prepar'd with warm Water, are abundantly plain to every one who reflects, that the frequent Use of warm Water, relaxes the Organs of

Digestion, and all the Solids in general, and must consequently prove pernicious.

Cactos, Offic. *Carduus esculentus*, Park. *Cinara spinosa*, cujus *Pediculi* *esitantur*, Boerh. Ind. A. The Chardon. It is found in Italy, and agrees in Virtues with the Artichok.

Calamintha. There are five Sorts of this Plant made use of in Medicine; the first is the *Calamintha montana*, Offic. *Calamintha vulgaris*, Park. *Calamintha vulgaris vel* *Officinarum*, Boerh. Ind. Alt. *Calamint*. It is found in Hedges, flowering in June and July. The Antients extoll'd it for its heating, alexipharmic, resolvent, and discutient Qualities, and prescrib'd the external and internal Use of it, affirming, it kill'd Worms. It is good for phlegmatic Constitutions, and such as are afflicted with Flatulences, and is very conducive to the Relief of Women labouring under Obstructions of the Uterus, a Fluor Albus, or a catarrhus Disorder of the Womb. It is a powerful Provoker of the Menfes, and even excites them in Women big with Child, and kills the Fœtus. It is said to expel the Lochia, Secundines, and Fœtus. It is an excellent Diuretic, cleanses Ulcers of the Kidneys, and cures Discharges of bloody Urine. Boil'd with Oxymel, it is of great Service in Asthmas, or Orthopnæas. It ought not to be exhibited to those, who have no Occasion for an additional Stimulus, for it acts by producing a Heat, which, tho' small, is nevertheless often found prejudicial to the Asthmatic. But where the languid and relaxed Fibres are to be stimulated, or the sluggish Humours roused into a brisker Motion, *Calamint* will be found of singular Use and Importance, and is, therefore, justly rank'd in the Classes of cordial, alexipharmic,

lexipharmonic, stomachic, carminative, uterine, and emmenagogue Medicines; and is used in Clysters, Cataplasms, Fomentations, and such Baths as are intended for the Purposes of Resolution, Discussion, and provoking the Menfes. It is an Ingredient in the *Tberiac Andromachi*.

The Second, is the *Calamintha magno flore*, Boerh. Ind. A. *Calamintha montana præstantior*, Ger. Park. Mountain Calamint. It is cultivated in Gardens, and agrees in Virtues with the former.

The Third, is the *Calamintha*, Offic. *Calamintha Odore Pulegii*, Ger. *Calamintha altera*, odore *Pulegii*, *foliis maculosis*, Park. *Calamintha Pulegii odore*, seu *Nepeta*, Boerh. Ind. A. Field Calamint. It grows about the Roots of Hedges, and by the Sides of Fields, flowering in June. The Herb is used, and agrees in Virtues with the first Species, to which it is a Succedaneum.

The Fourth, is the *Calamintha palustris*, Offic. *Calamintha aquatica*, Ger. *Mentha arvensis verticillata birsuta*, Boerh. Ind. A. Water Calamint. It grows in moist Places, flowering in July. The Herb is used, which agrees in Virtues with the *Pulegium* or Penny-royal.

The Fifth, is the *Calamintha incana*, *Ocymi foliis*, Hoary Calamint, with Leaves like Basil. This Species is possess'd of the same medicinal Virtues as the first Sort.

Calitrapa, there are two Sorts of this Plant, the first is the *Carduus stellatus*, Offic. Ger. *Jacea stellata*, *folio Papaveris erratici*, Boerh. Ind. A. Star Thistle. It grows upon Commons, flowering in June. Its Leaves are bitter, and give a faint Tincture of Red to blue Paper, but the Root a deeper. It contains a Salt like the natural Salt of the Earth. It is febrifugous, vulnerary, and aperitive. Four or six Ounces

of its Juice is recommended in an intermitting Fever, and is good to remove Webs of the Eyes. A Water distill'd from the Flowers, or the Seeds in Powder, are good to expel the Stone. The Root is good in slow Fevers, and purge the Body of ill Humours.

The Second, is the *Calitrapa*, Offic. *Carduus solstitialis*, Ger. *Jacea stellata*, *Spina solstitialis dicta*, *foliis Cyani*, Boerh. Ind. A. Saint Barnaby's Thistle. It is reckon'd aperient, deobstruent, lithontriptic, and is good to assuage the Fervor of the Blood. *Camerarius* commends it for the Jaundice, and all Sorts of Obstructions; for the Cachexy, Dropsy, Pleurisy, and Sciatica.

Calendula. Of the *Calendula* there are several Sorts, but the Chief for medicinal Uses, is the *Calendula*, Offic. *Caltha vulgaris*, Boerh. Ind. Alt. Garden-Marigold, the Flowers of which are only used in the Shops. They are of an aromatic Smell, and when chew'd, exert a penetrating and almost burning Acrimony, from whence they derive their sudorific Virtues, in which they are scarce inferior to Saffron. *Schulzius*, in his *Prælectiones*, informs us, that they have uncommon Efficacy ascribed to them, by several eminent Physicians, in the Cure of malignant and pestilential Fevers; in which Case they are recommended by *Ray*. They are likewise very proper, where stimulating Medicines are necessary, for which Reason, a Decoction of them is often exhibited to promote the Eruption of the Small Pox, and according to *Ray*, a Posset-Drink impregnated with the Flowers, has for a long Time been used in England to answer the same Intention. Their resolvent, and aperient Qualities render them useful in Decoctions, for provoking the obstructed Menfes: and when used in Vapour Baths, they

they not only excite the Menfes, but alfo expel the Fœtus and Secundines.

The second Sort, is the *Calendula arvensis*, Ger. *Caltha arvensis*, Boerh. Ind. A. The Wild Marigold. All the Preparations of this Plant, are excellent for the Jaundice, Palfy, Dropsy, Small Pox, malignant Fevers, and Green Sickness; its Leaves and Flowers are good to eat as a Sallad, especially for Children who have scrophulous Tumors. *Casalpinus* prescribes the Water of Marigolds for contagious Distempers; *Tragus* commends it as an excellent Remedy to cure the Redness and Inflammations of the Eyes.

Calendula palustris Populago, Offic. *Populago flore majore*, Boerh. Ind. A. *Caltha palustris major*, Ger. Marsh Marigold. The Herb is only used in the Shops, and is, by *Dioscorides*, said to be good for removing the Pains of the Loins; and according to *Boerhaave*, it is of a caustic Quality, highly acrid, and resembling Hellibore.

Camphora. Camphire. This is not mentioned by the ancient Greeks, and was first introduced into the *Materia Medica* by the Arabians. It is a Substance of a very singular Nature, dry, friable, powder'd with Difficulty, light, white, pellucid, and not unlike the Crystals of Salt, of an acrid and somewhat bitterish Taste, of a penetrating Smell, and to some greatly offensive. It flames in an open Fire, and when kindled, burns till it is totally consumed; in Water it also, burns, and sends forth a thick dark Smoak, which also produces a blackish Soot. When put into a pure glass Vessel, with an Alembic fitted to it, it melts by the Force of Fire, ascends into the Alembic, and there concretes again into the Form of Camphire, without the least Alteration. Many celebrated Chymists have taken Cam-

phire for a solid volatile oleous Salt, form'd in the same Manner as the *Offa Helmontiana*, of a saline and oleous Principle; but this Opinion is rejected by others. *Boerhaave* affirms it to be a highly perfect, most simple, and volatile Refin, or an Oil of a solid Form and Consistence. *Hoffman* affirms, that Camphire, is, as it were, a distilled Oil in a dry Form, or a most subtile volatile Oil, which seems to have in its Composition a certain subtile Acid, to which its Form is owing, and of which it may be deprived, if mixed with Salt of Tartar, and subjected to Distillation with highly rectified Spirit of Wine; for in this Case, a Spirit is yielded, whose Taste and Smell discover it to be sufficiently saturated, with the Corpuscles of the Camphire, and which, when poured into Water, does not become milky, nor is any of the Camphire precipitated, as happens with camphorated Spirit of Wine. What remains after the drawing off of the Spirit, is a well saturated Solution of Camphire. But when dropped into Water, it does not run into a thick Coagulum, like camphorated Spirit of Wine, but may without Difficulty be mixed with the Water; for the Salt of Tartar entering into the most intimate Texture and Composition of this Substance, dissolving the oleous and thick Parts, and inducing a Change on the more subtile Acid, occasions a Resolution of this Substance into highly subtile Parts, not afterwards to be coagulated; and the Change of its Colour from white to brown, is owing to the Sulphur, or phlogistic Principle, being disentangled, and set at Liberty by the Alkali. In the Truth of Camphire's being a pure inflammable Oil, in a solid Form, we are confirmed by this Circumstance, that in hot Climates, and sometimes even in Europe, aromatic Substances are often heated to such a Degree, that their Oils

Oils are converted into Camphire, as happens in the Distillation of the Oil of Anise, Cardamoms, Caraway, Fennel, Laurel, Zedoary, Cinnamon, Southernwood, and Thyme. The same Phænomenon, is sometimes observed to happen, when these Oils, dropping thro' a long narrow or cold Worm, form themselves into a solid kind of Mass, which blocks up the Cavity of the Worm, but may be again dissolved by Heat. But because these camphorated Substances, want either the Hardness, the Smell, or the other Properties of the common Camphire of the Shops, we shall only here treat of that Camphire, which is produced by the *Arbor Camphorifera*, and which is called the *Camphora Japonensis* or *Camphora Sinenfis*. If Camphire, when put upon hot Bread, becomes moist, it is a Sign of its being good and genuine; but, if it becomes dry, it is a Proof of its being bad and spurious. When it is mark'd with reddish or black Spots, these are said to be produced by handling it with impure Hands; or to be the Effects of Moisture; but this is easily prevented, by gathering it in a linnen Cloth, and immersing it in warm Water, with an Addition of Lemon Juice. Thus when it is well washed, it must be dried in a shady Place, by which Means it becomes white. Formerly it was the Custom, in order to prevent the Exhalation and Diminution of Camphire, to keep it in Linseed, the Seeds of Fleawort or some others of a like Nature, which by their large Quantities of Oil, might, as it were, entangle the volatile Parts of the Camphire, and prevent their flying off. Others think that the same Effect is produced by Pepper; but what has given Rise to this Notion is somewhat hard to determine. The best way to preserve Camphire, is, to anoint its Surface with expressed Oil of sweet Almonds; for the Pores being by

these Means block'd up, its more subtle and volatile Parts, will not so easily fly off, as otherwise they would do; but as it may be well enough preserv'd in glass Vessels well stop'd, to prevent the Admission of Air, so there is no great Necessity for the preceding Method. Camphire is applied to various Uses. The *Indians* mix it with acrid and aromatic Substances, of which they form Troches, for promoting a Discharge of the Saliva, when chew'd; because Camphire in former times was thought to be possessed of cold Qualities, it is likewise said to be given to be chew'd and smelled by the *Monks*, to extinguish Inclinations to Venery. But the Falsity of this Opinion is now sufficiently known; for as Camphire consists of highly volatile Parts, it is found to possess Virtues highly penetrating, discutient, resolvent, stimulating, corroborating, alexipharmic, and is proper for resisting Putrefaction; but it does not act in a strong and drastic Manner, because it does not remain long in the Parts into which it has penetrated, but is in a very short Time exhaled. *Tralles* recommends it in scorbutic Disorders. It is said to be possess'd of an alexipharmic Quality, when used internally, against the Wounds of Serpents. The Notion of its being possessed of a cold Quality, may possibly have taken its Rise from the Observation of its cooling Effects, in Inflammations of the Eyes, and Burns; for it is of singular Efficacy in removing external Inflammations, as also internal, and which threaten a Sphacelus and Death if they are severe; but more especially if they are situated in the membranous Parts; for answering which Intentions, it is most happily exhibited with Nitre; as, also, in continued Fevers, which for the most Part have something of an inflammatory Nature in them; likewise in most other Kinds of Inflammations, Pleurisses, Phren-

Phrenfies, Quinseys, and Inflammations of the *Uterus*. The celebrated *Hoffman* used Camphire, with the Addition of Bezoardic Powder, with great Success; for immediately after the Exhibition of this Medicine, the burning Heat, the Delirium, the Thirst, and the Watchings were greatly abated. *Stahl* styles Camphire, the Subduer of all Inflammations; and the learned *Werthofius* found very happy Effects arise from three or four Grains of Camphire in nitrous Emulsions, taken every two or three Hours in acute Fevers, Phrenfies, and Deliriums. The learned *Tralles* excellently demonstrates the refrigerating and antiphlogistic Qualities of Camphire, and how efficacious it is, in Conjunction with Nitre, in a Pleurisy. An Instance whereof he gives us in his Work intitled *De Remediis Terris*. *Capuccius* an Italian Physician, affirms the Virtues of Camphire to be very great, both in curing and preventing pestilential Fevers, for which Purpose one or two Grains of it may be chew'd, and swallowed by itself, three or four Times a Week, unless the State of the Patient renders the more frequent Use of it necessary. *Craan*, a celebrated Dutch Physician, in a Phrensy, Madness, Pleurisy and Peripneumony, highly extolls Champhire with Spirit of Nitre. In Inflammations of the Kidneys he recommends Sal Prunellæ and Camphire; for allaying the Thirst in continued Fevers, he orders three Grains of Camphire to be added to proper Powders, which Medicine with the *Bezoardicum Minerale*, he also commends in pestilential Fevers. The *Philosophical Transactions* afford us some Instances, of Maniacs cured by half a Dram of Camphire exhibited in a Bolus, Morning and Evening. *Simon Sethi* and *Rhafs*, inform us, that Camphire cures the most acute Disorders, as Pains of the

Head arising from Heat and Inflammations, and those especially of the Liver. *Tachenius* informs us, that *Avicenna* was the first of the practical Physicians, who observed the Virtues of Camphire in acute Disorders, and called it the *Theriaca contra Venena calida*, or the *Theriaca* against hot Poisons. *Du Verney* thinks Camphire exhibited in cordial Potions, an excellent Remedy against the Head-ach in malignant Fevers, and tells us that he himself frequently prescribed it, with that Intention. *Mindererus*, in his Work *De Peste*, ranks Camphire, among the strongest Antidotes against the Plague; and affirms, that it is more efficacious than any of the Bezoardic Preparations, as it prevents Putrefaction, and expels the poisonous Effluvia. *Hoffman*, in all putrid Disorders, and in the Plague at its Accession, and about its Crisis, recommends Camphire to be given in an acid Vehicle, as also with Balsamics, in a Gonorrhœa. In all dangerous and terrible Hæmorrhages, especially such as accompany malignant Fevers, as also in Spittings of Blood arising from internal Causes, such as the Spasms of the Viscera, Camphire is of singular Use. In Vomittings of Blood, after Venesection, *Riverius* orders half a Scruple of Camphire, to be exhibited in four Ounces of Oxycrate, or Plantain Water. *Joubert* affirms of his Master *Rondeletius*, that in all Vomittings of Blood, especially those proceeding from acrid Defluxions, he successfully used Camphire, and sometimes gave a whole Scruple of it, diluted in a Glass of spring Water, with a little Vinegar. Camphire, when mixed with Nitre, is of the greatest Efficacy in all Hæmorrhages; besides, nothing is found more useful in promoting the accustomed Evacuations of the blood, than Camphire, especially when exhibited in Conjunction with balsamic and antit-

tispasmodic Specifics. *Wedelius de Medicam. Facultat.* justly observes, that Camphire is of singular Efficacy, in promoting the brisk and lively Motion of the Blood, and must consequently be improper, when that Fluid is too much rarified, or put into an Ebullition; since by that very Means; the Watching, the Thirst, and Heat would be increased. *Mindererus* is of Opinion, that Camphire, ought never to be exhibited, to such as have infirm Heads, or weak Stomachs. Hence it is, that studious and sedentary People, and Women of delicate Constitutions, who cannot bear strong Smells, have a thorough Aversion to Camphire, and that these latter, by the Use of it, fall into hysteric Fits, to which, however, it puts a Stop; in more robust Constitutions. With Respect to the external Use of Camphire, some put a Grain or two, into a rotten Tooth, and even use it as a Gargarism in the Tooth-ach. Camphire worn as an Amulet; has been experienced an effectual Remedy, against Fevers, as we learn from the *Miscellanea Curiosa Medico Physica Academiae Naturae Curiosorum*; *J. Boecklerus* gives the following Account of it, "Some hang Camphire about their Necks, for the Cure of an intermittent Fever, and the Camphire is sure to fly away, but the Fever very often remains." However, this I dare assert, that Camphire hung about the Neck, in pestilential Times, so as that the Effluvia may be received into the Nostrils, is no improper Preservative; because it corrects the Atmosphere of the Body, and so prevents the ill Effects of the contagious Air. Camphire is a usual Ingredient in Ointments and Plaisters, for the Sake of its Stimulus, which is of Service, in mollifying and dissolving hard Tumors, and also opens the Way, for the Virtues of the o-

ther Ingredients to penetrate deeper thro' the Pores of the Skin. When it is to be mixed for a Plaister, the best Way, as *Etmuller* advises, is to dissolve it with Balsam of Peru. The Water of Camphire, according to the Account given us by the *Arabians*, distills from the Tree which produces the Camphire. But *Garcias* observes it to be a Fable. Others, therefore, call by this Name, the Water; in which kindled Camphire has been immers'd, and recommend it to be drank by Women labouring under Hysterics, in which it is excellent. A Water of this Kind is prescribed in the *Pharmacopœia Pauperum*, under the Title of *Julapium Camphoratum*. *Hortsius* relates, that some Virgins, taken with a *Furor Uterinus*, met with most Relief, by using for their ordinary Drink, Water, or Beer, in which kindled Camphire had been quenched. The Solution of Half an Ounce of Camphire in a Pint of highly rectified Spirit of Wine (tho' the *London* and *Edinburgh* Dispensatories direct an Ounce of Camphire) is a very common Topic in Contusions, Luxations, and Rheumatisms; because it readily dissolves the Stagnations of the Humours, in different Parts of the Vessels, and causes them to exhale, or puts them in Motion; whence it is of extraordinary Service, not only in all Pains and Tumors, but also in all inflammatory and erysipelatous Affections; restores Warmth to the Feet and Hands benumb'd with Cold; mitigates the Pain of the Hæmorrhoids, prevents a Gangrenè, and is commodiously applied in Cases of a beginning or confirm'd Putrefaction, a Sphacelus, fetid Ulcers, and Wounds which are putrid, or inclining to Putrefaction; as also the *Cholera Morbus*, the Cholic, and the Contraction or Resolution of the Nerves consequent thereto, and the like Affections both

of the internal and external Parts: It may, also, be given internally, to the Quantity of twenty Drops or more, where Diaphoretics are required. *De Maets* recommends in Affections of the Head, one Dram of camphorated Spirit, mixed with an Ounce of Spirit of Wine distill'd upon cephalic Herbs, and three Quinces of Rosemary Water: Some Drops of this Mixture drawn up the Nostrils will give immediate Ease, in the Head or Tooth-ach. Observe, that the Water of Rosemary mitigates the other Ingredients, and that its Strength, is augmented or diminished, in Proportion to the Quantity of Rosemary Water.

Camphorata, Offic. *Camphorata hirsuta*, Raii Hist. *Camphorata Monspeliensum*, J. B. Stinking Ground Pine. The Herb, which is used, is of a drying and astringent Quality, strengthening to the Nerves, and serviceable in the Gout, Convulsions, Palsy, Defluxions of the Eyes, and Catarrhs. The Plant is a Cephalic, is effectual for Wounds according to *Lobelius*, and is prescrib'd, by some, in Dropsies. The Tops of this Plant are used, in Baths and Fomentations, for Disorders and Swelling of the Joints; for Cramps, Palsies, and other Affections of the Nerves.

Canella alba, Park. Theat. *Cassia lignea Laurifolia Americana*, cortice albo, valde acri & Aromatico, Pluk. Almag. *Arbor Baccifera Laurifolia*, Aromatica, fructu viridi calyculato racemoso, Philosoph. Transact. The wild Cinamon Tree. All the Parts of this Tree, when fresh, are very hot, aromatic, and biting to the Taste, not much unlike Cloves, which are often so troublesome, as to require a Remedy from fair Water. The Bark of this Tree, is what is mostly used, as well in the Plantations of the English,

between the Tropics in the *West Indies*, as in *Europe*, and is cured without any Difficulty, by only cutting the Bark, and letting it dry in the Shade. It likewise, in the *West Indies*, as well as in *Europe*, is thought a very good Remedy, against the Scurvy, and to cleanse and invigorate the Blood; being in *London*, both in Druggists and Apothecaries Shops, used for those Purposes, under the Name of *Cortex Winteranus*, which it is not, tho' it may very well supply its Place. It is in the *West Indies*, mixed and given with Steel, or some other Medicines; but if the Patient is of a hot Constitution, it is more prejudicial than beneficial, being of a very warm Nature. The Bark, if mixed with Water, and distilled *per Vescam*, yields an aromatic Oil, which, like the Oil of Cloves, sinks to the Bottom of the Water. When it is mix'd with some small Quantity of the Oil of Cloves, it has been sold for it. The Bark is, also, accounted a Specific against the Scurvy, is a good nervous Medicine, useful in Palsies and Convulsions, and is of singular Service, against Diseases of the Stomach and Bowels.

Cannabis, Offic. *Cannabis Sativa*, Park. Boerh. Ind. A. Hemp. The Root boil'd, and applied by Way of Cataplasm, mitigates Inflammations, discusses Tumors, and dissolves tophaceous Concretions at the Joints. The Seed of Hemp is the only Part exhibited in Physic, which when boil'd in Milk till the Hulls crack, is esteem'd efficacious in old Coughs, as also a Specific against the Jaundice. It has been accused of rendering Persons impotent in venereal Affairs; but how inconsistent that is, will appear, not only, by its making Hens lay their Eggs in greater Plenty, if moderately given; but also the famous *Bangue*, so much extol'd

toll'd both by the *Persians* and *Indians* to promote Venery, is a Sort of Hemp.

Cannacorus latifolius vulgaris, Tournf. *Harundo florida*, Ger. The Indian Reed. This Plant grows only in warm Places, the Cold being very injurious to it; it is supposed that the Leaves, which are wrapp'd about the Gum Elemi, belong to this Reed. It is deterfive and aperient.

Cantabrica. Convolvulus minimus, Offic. *Convolvulus minimus, Spicæ foliis*, Ger. *Convolvulus Linariæ folio, assurgens & humilior*. Boerh. Ind. A. Lavender leaved Bind-Weed. It grows wild in the Fields, flowers in *June*, and is by some recommended as good against Worms.

Capparis, Offic. *Capparis Rotundiore folio*, Ger. *Capparis Spinosa, fructu minore, folio Rotundo*. Boerh. Ind. A. Capers. The Caper Bush grows in the southern Parts of *France* and *Italy*, in sandy and stony Places. Those are generally thought the best which, are imported from *Genoa*; but those brought from *Alexandria* to *Venice*, are esteem'd by some still better, tho' larger than the *Italian* Capers; for the largest are judged best as being most entire. Their austere bitterish Taste, sufficiently convinces us of their astringent and corroborating Virtues; and if we consider the Qualities they derive from the Vinegar and Salt, in which they are preserved and brought to us, we may easily conceive, that they are of a resolvent and inciding Nature. For this Reason, they are recommended, in Order to strengthen a languid Appetite, and purge the Stomach of gross pituitous Humours. They are good for Obstructions of the Viscera, especially those of the Spleen, for the Palsy, and Convulsions arising from a Superfluity of peccant Humours; nor

are they less recommended in long and chronical Fevers. *Laurentius Joubert*, in the Plague, recommends them season'd with Salt, gently boil'd in Water, and eaten with Vinegar; for as he says, "they excite an Appetite, and open Obstructions;" for this Reason, they ought not only to be allowed, in pestilential Cases, but also recommended, because they resist Putrefaction. Externally, says *Etmuller*, the Pickle of Capers, is applied to the Side, under the left Hypochondrium with Linen Cloths, or a Sponge, for discussing Swellings of the Spleen. If to this, Mustard Seed is added, that the Vinegar may be impregnated with its volatile Salt, it is an excellent Remedy in Disorders of the Spleen.

Caprifolium, Perichlymenum Mastrisylvæ, Offic. *Perichlymenum, sive Caprifolium vulgare*, Park. Theat. Honey Suckle, or Wood Bind. It grows almost every where, flowering great Part of the Summer. The Leaves, only, of this Plant are used in Medicine; they are exhibited in Gargarisms, for sore Throats; tho' others think them not so proper for that Intention, on Account of their hot Nature. Some prescribe them for a Cough and Asthma, and to remove Obstructions of the Liver and Spleen. The Oil, made by the Infusion of the Flowers, is esteem'd very warming, and efficacious in removing Cramps, and Convulsions of the Nerves. Their Bark is acrid, salty, styptic, and stinking. Their Salt resembles Sal Ammoniac, but contains some fetid Oil and Earth. The Decoction of Honey Suckle Leaves, is both vulnerary and deterfive, good for Diseases of the Throat, and Wounds of the Legs. The Leaves bruised, cure cutaneous Diseases; and the distilled Water of the Flowers, asswages Inflammations

tions of the Eyes, and strengthens Women in Labour.

Capficum, Piper Indicum, Offic. Capficum Siliquis longis propendentibus, Boerh. Ind. A. Capficum longioribus Siliquis, Ger. Guinea Pepper. It is fown every Year in Gardens, flowering in *August*, and produces red Pods, towards the latter End of *September* and *October*, but perishes with the first Frost. A Decoction of Guinea Pepper with Penny Royal, is commended by some, to expel a dead Child. The Skins boil'd, and used as a Gargle, help the Tooth ach. And a Cataplasm made of the Seeds, mix'd with Honey, and apply'd to the Throat, is good for a Quinsy, otherwise it is not much used in Physic.

Caranna, Offic. Park. Theat. The Caranna Tree. The Caranna Tree, is a Species of Palm, and spontaneously pours out its Resin or Gum, when an Incision is made in the Bark. This Gum is outwardly of a blackish Colour, but internally, resembles that of Pitch, and is of a bitter, pinguious, and oleaginous Taste, of a fragrant Smell, not much differing from that of Lavender. This Gum is imported in soft Masses, wrapt up in the Shreds of Reeds, or Bulrushes, from *Carthagina*, a Province in the *West-Indies* of *New Spain*, of which that is esteemed best, which is whitest, especially if soft, and of the Consistence of a Plaister. In Virtues it agrees with the Tacamahac: This Gum, is of singular Efficacy, in Pains of the Joints, to which if applied, it speedily removes them, those Cases only excepted, where there is a Defluxion of hot Humours; it discusses inveterate Tumors, and stops Defluxions of cold Humours. It is highly beneficial in all Pains of the Brain and Nerves, and without the Admixture of any other Medicine, cures recent Wounds, especially of the

Nerves and Joints. If applied to the Ears and Temples, it stops Defluxions on the Eyes, and other Parts. *Etmuller* tells us, that in Cardialgias, Pains, and other Disorders of the Stomach, it is often applied by Way of Plaister to the Region of the Stomach. *Geoffroy* observes, that it is term'd a Gum, but very unjustly; because it is dissoluble, only in Spirit of Wine, which is the Property of resinous Substances.

Cardamine, Offic. Ger. Emac. Nasturtium pratense majus, five Cardamine latifolia, Park. Theat. Meadow Cresses, or Ladies Smock. It grows every where in the Meadows, and flowers in *April*. This Plant, in some Measure resembles Water Cresses, not differing much from it, in its Virtues, being both heating, warming, and good for the Scurvy. It may, where Water Cresses cannot be had, supply their Place, tho' it is but seldom used in the Shops.

Cardamomum, Cardamom. We have three Sorts of Seeds in the Shops call'd by this Name. The first of which is, the *Cardamum Maximum, Grana Paradisi, Offic. Cardamomum Arabum Majus, Ger. Melleguetra five Cardamomum Maximum, & Grana Paradisi, Park. Theat.* Grains of Paradise. They have the same Virtues as Pepper, and are a Specific in all paralytic Diseases. The second is the *Cardamomum Majus, Offic. Raii Hist. Cardamomum Majus vulgare, Ger. Emac. Great Cardamoms.* These being grown quite out of Use, are not to be met with in the Shops. Notwithstanding the Seeds are the Part in Use, which are of a heating and drying Quality, comfort the noble Parts, attenuate, discuss Flatulences, help Concotion, provoke Urine and the Menses, help Shortness of Breath, and remove Obstructions of the Liver, Spleen, and Mesentery. The third

is, the *Cardomum minus*, Offic. Boerh. Ind. A. *Cardamomum minus vulgare*, Ger. Emac. Common Cardamums. This Sort is in frequent Use; being of a warming Nature; they greatly comfort and strengthen the Stomach and Bowels; they aid Digestion, and expel Wind; they are excellent in all Distempers incident to the Head and Nerves; they greatly provoke Urine, as also the Menfes, and are of great Service in the Jaundice. These Seeds are us'd in the *Extractum Catharticum*; *Aqua Seminum Cardamomi*; *Infusum amarum Purgans*; *Infusum Senæ Commune*; *Tinctura Rhabarbari*; *Tinctura Amara*; *Tinctura Cardiaca*; *Tinctura Senæ*; *Tinctura Stomachica*; *Species Aromaticæ*; *Confectio Cardiaca*; *Mithridatium* and *Tberiaca Andromachi*.

Cardiaca, Offic. Ger. Boerh. Ind. A. Mother Wort. It grows in Lanes and wet Places, and by Wall Sides, and flowers in June. This Plant is called *Cardiaca*, because it relieves in Faintings, and Disorders of the Stomach, the superior Orifice of which is called *Cardia*; for according to *Shroder* in his *Pharmacopœia*, it is of singular Service, in Distensions of the Hypochondria, and Disorders of the Stomach in Children. The Herb, is of a highly bitter and penetrating Taste, a Circumstance which indicates its stimulating, inciding, resolvent, and aperient Qualities, in Consequence of which it is proper, in Diseases proceeding from a Redundance of Phlegm, or viscid Juices. Hence, it is exhibited with an Intention to provoke Urine, promote the Menfes, and facilitate difficult Labours. A Decoction of Mother-wort, and the Powder of it, mixed with Sugar, are, by *Ray*, said to be Medicines of uncommon Efficacy, in Palpitations of the Heart, Affections of the Spleen and hysteric

Disorders. *Matthiolus* and *Dioscorides* affirm, that a Spoonful of its Powder, drank in Wine, is of singular Service in difficult Births. *Emmuller* informs us, that this Plant cut down, dried, and by Boiling reduced to the Form of a Cataplasim, is, in Consequence of its inciding and resolvent Qualities, very good against those Disorders of Children produced by a mucous Acid, and the Flatulences arising from it, if applied to the Region of the Stomach and Hypochondria. A Water distilled from Mother-wort, with Oak of *Jerusalem*, is used in Inflammations of the Hypochondria of Children. *Simon Pauli* in his *Quadripartitum Botanicum*, orders its Leaves to be boil'd in the Oil of Wormwood, and of bitter Almonds, and applied to the Navel, in Order to kill Worms of the Intestines.

Carduus, the Thistle. Of this Plant there are a great many Sorts, in so much that *Boerhaave* enumerates no less than thirty-three different Species; but we shall only take Notice of those to which medicinal Virtues are ascribed.

The first of these is, the *Carduus, caule crispo, capitulis minoribus*. *Carduus spinosus, seu Sylvestris*. Thistle upon Thistle. *Riverius* observes, that Half an Ounce of the Roots of this Thistle, boil'd with two Drams of Liquorice, is a very good Medicine, for those who are afflicted with the Stone, cleansing the Bladder and Kidneys from Sand and Gravel.

The second is, the *Carduus Hæmorrhoidalis*, Offic. *Carduus Vincetoxicum Repens Sonchi folio*, Boerh. Ind. A. *Carduus Vulgatissimus Viarum*. The common creeping Way Thistle. It grows in uncultivated Places, and flowers in July and August. It is called *Hæmorrhoidalis* (*Hæmorrhoidal*) from its Effects; for being boil'd in Water, and reduced to

a Cataplasm, it greatly alleviates the Pains of the Hæmorrhoids. Some affirm, that the Tubercles arising from the Bittings of Insects on the Stalks, if worn in a Bag, or tied in the Patient's Shirt, produce the same Effect; but others advise wearing the dried Heads of the Plant in a Bag.

The third Species is, the *Carduus Mariæ*, Offic. *Carduus Mariæ vulgaris*, Park. *Carduus albis maculis Notatus vulgaris*, Boerh. Ind. A. Ladies Thistle. This Plant grows upon Banks and Borders of Fields, flowers in June, and seems to contain a Salt, not unlike the *Oxysal diaphoreticum Angeli Salæ*, that is, an acrid Salt, abounding with Acid; thus it is both sudorific and diuretic. Four Ounces of the Juice of its Leaves, give great Relief in the Dropsy. The Seed is of a stimulating and opening Property; the Dose of which is a Dram in Powder, but it is oftener used in Emulsions, being mixed with other Seeds for that Purpose. An Emulsion prepared of the Seeds, with Honey, or a little Syrup of Violets, and drank, is highly commended in severe pleuritic Pains. *Tournefort*, for the Pleurisy, and that Species of Rheumatism which resembles it, advises an Emulsion, prepared of two Drams of the Seeds of *Carduus Mariæ*, with six Drams of the distilled Water of the Leaves. "This Medicine, says *Pontidera*, gives Relief under all Pains, mollifies Hardnesses, evacuates Humours, and maturates Pus, wherefore it is recommended, as a present Remedy for all Disorders of the Throat and Lungs." The Seed pulverised, and taken in Wine, from one Dram to two, is recommended against an *Hydrophobia*, as being an excellent Sudorific. Externally it is accounted good for *Nomæ*, and phagedenic and corroding Ulcers.

The fourth Species is, the *Acanthium*, Offic. *Acanthium vulgare*, Park. *Carduus tomentosus Acanthi folio vulgaris*, Boerh. Ind. Cotton Thistle. This Plant never flowers till its second Year, and then continues in Bloom from June to August; but when the Seed is ripe, the Root perishes. The Root is esteem'd opening, and diuretic, carminative and stomachic, discutient and resolvent. Some commend it for the Tooth-ach, and for epileptic Disorders in Infants.

The fifth Species is, the *Carduus Erioccephalus*, Offic. Boerh. Ind. A. Woolly headed Thistle. It flowers in July and August. *Borelli* says, its Juice, or bruised Leaves, cure the Cancer of the Nose and Breast; he calls it *Ornipodon*, and recommends the Use of it in those Cases.

Carlina. The Carline Thistle. *Boerhaave* makes mention of no less than seven different Species of this Thistle. The first of which is, the *Carlina*. *Chamæleon Albus*, *Carlina* Offic. *Carlina humilis*, Park. Theat. *Carlina acaulos magno flore*, Boerh. Ind. Carline Thistle. It grows in Germany, and other Parts beyond Sea, and flowers in July. The Root, which is the only Part used, is esteemed sudorific, alexipharmic, and efficacious against all contagious and pestilential Diseases, the Plague itself not even excepted. It is no less diuretic, helps the Dropsy, promotes the Catamenia, and is good in all hypochondriac Distempers, and is very properly exhibited, where Nature is to be irritated, and requires a Stimulus, to throw off an excrémentitious Load; whence it is apparent, how proper it is, for removing Obstructions, exciting a Diaphoresis, provoking the Menstrues, promoting a Discharge of the Urine, and killing Worms, in Consequence of its Bitterness. The *Carline Thistle* banishes Sleep, and consequently prevents

prevents preternatural Drowfiness. The other Species have much the same Virtues ascrib'd to them.

Carpobalsamum, the Fruit of the Balsam Tree. *Prosper Alpinus* informs us, that in *Egypt*, the *Carpobalsamum* is used in all the Intentions, for which the Balsam itself is applied, tho' it is not so efficacious. The Dose is generally two Drams, with a Decoction of Spikenard. It is also used in Fumigations, for uterine Disorders arising from a cold Cause. The only Use the *Europeans* make of the *Carpobalsamum* is, in the *Venice* Treacle and Mithridate, and that not much, for Cubebs and Juniper Berries, often supply its Place.

Carthamus. Bastard Saffron. *Boerhaave* enumerates three Species of this Plant. The first of which is, the *Carthamus Cnicus*, Offic. *Carthamus Officinarum flore croceo*. *Boerh.* Ind. A. *Cnicus sive Carthamus sativus*, Park. Bastard Saffron. It is sown in Gardens and Fields, and flowers in *July*, the Seeds only are used in the Shops, which are accounted a strong Cathartic, evacuating tough, viscid Phlegm, both upwards and downwards, and consequently, are thought to clear the Lungs, and help the Phthific; they are likewise good against the Jaundice, tho' now pretty much out of Use. With Regard to their Virtues and Efficacy, *Dioscorides* gives the following Particulars. The expressed Juice of the triturated Seeds, exhibited in Conjunction with Honey and Water, or the Broth of a Fowl, purges the Intestines; but is prejudicial to the Stomach; of this Juice, with the Addition of Almonds, Nitre, Anise, and boil'd Honey, are prepared Cakes, which render the Body soluble; these Cakes are to be divided into four Parts, as large as a Walnut, two or three of which, are sufficient for a

Dose, to be taken before Supper. *Hippocrates* in *lib. de Diæta*, informs us, that *Cnicus* is purgative. *Galen* affirms, that the Seeds of *Cnicus*, are only used for Purges. *Paulus Aegineta* and *Sylvius*, reckon them among the Hydragogues. *Baubine* says, that the Seeds bruised and boiled in the Broth of Flesh, or Chickens, and drank, evacuate Phlegm and tough viscid Humours. *Etmuller* prescribed them, when the *Primæ Viæ* were loaded with a thick and viscid Mucus, in Disorders of the Breast, in Asthmas, and Coughs produced by thick and viscid Matter; for which Reason, they are ranked among the Medicines which evacuate Phlegm: The Seeds are, by Experience, found to be a drastic purgative Medicine, which by Reason of its acrid Quality, in Conjunction with its Viscidity, generally excites violent Gripes, with an Inflammation of the Abdomen.

Another is, the *Chamæleon Niger*, Offic. *Chamæleon niger verus*, Park. *Chamæleon niger umbellatus flore cæruleo hyacinthino*, C. B. Black Chameleon. It grows in *Greece*, and flowers in *June*; the Root is only used, which is of so acrimonious a Quality, that its Juice burns the Skin, but it is very efficacious in cleansing malignant Ulcers.

Carum, Offic. *Carum Vulgare*, Park. Theat. *Carui*, *Boerh.* Ind. A. *Cuminum pratense*, *Carui officinarum*, C. B. Caraways. The Seed is one of the greater hot Seeds, is stomachic, and carminative, expels Wind, and is serviceable against the Cholic, and Weakness of the Stomach, helps Digestion, is good for Dizziness of the Head, and Weakness of the Sight, to provoke Urine, and increase Milk in Nurses. The Seed of this Plant is in common Use, tho' some use the Root

in carminative Pifans and Glysters. The seed is stomachic, diuretic, and very proper to dissolve the glutinous Matter, which causes the Cholick. Caraway Seeds are put into Bread, as a Preservative against this Disease. Candied Caraway-seeds expel Wind. The chymical Oil is very acrid and penetrating; five or six Drops of it are prescribed in Oil of sweet Almonds, and some Drops of it in Spirit of Wine imbibed by Cotton, and put into the Ears, may be used in the Case of Deafness, instead of Syringing.

Caryophyllata, Offic. *Caryophyllata Vulgaris*. Park. Theat. Boerh. Ind. A. Ordinary Avens, or Herb Bennet. The Roots are only used, which being infused in Wine, give it a pleasant Smell and Taste, and render it more cordial, and chearing to the Spirits; they mitigate Pains arising from Cold, or Wind in the Intestines; they are of a cephalic and alexipharmic Nature, and manifestly binding and efficacious in all Kinds of Fluxes and Hæmorrhages. Avens is bitter, styptic, and its Root smells like Cloves; its Salt resembles Sal Ammoniac, but is greatly loaded with an Acid, and involved by a great deal of essential Oil and Earth. An Infusion of *Avens Root* in Wine, is stomachic, according to *Tragus*, and removes Obstructions of the Liver. The Wine is, also, very vulnerary and detergent. The Extract has the same Virtues, and is prescribed in Rheumatisms.

Caryophyllus. The Clove gilly Flower, Carnation, or Pink, of which there are many Species. As the *Caryophyllus flore simplici*, Offic. *Caryophyllus hortensis simplex flore majore*, C. B. *Betonica coronaria*, sive *Caryophyllus flore simplici sativus*, J. B. Single Pink. The medicinal Virtues of this Species, are the same with those of the subsequent.

Caryophyllus ruber. *Betonica*, *Tunica*, Offic. *Caryophyllus altilis major*, Boerh. Ind. A. *Betonica coronaria sativa sive Caryophyllus flos*, J. B. Clove Gilly Flower. The Flowers are esteem'd cephalic and cordial, and are principally used in a Vertigo, Apoplexy, Epilepsy and other Affections of the Head and Nerves, as also in a Syncope and Palpitation of the Heart. They are good in Wounds, facilitate Delivery, and are recommended in Weakness of the Stomach, Cardialgias, and pestilential Fevers.

Caryophyllus silvestris, Offic. *Caryophyllus silvestris vulgaris latifolius*, C. B. *Armenius latifolius flore rubro, saturo, holoserico*, Park. Wild Pinks. This Plant flowers in June, and is said to be good for the Stone and Epilepsy, taken with the Water of *Rest Harrow*, or *Lillies of the Valley*. Besides the Plants above mentioned, there are some Aromatics which go by this Name; the first of which is the *Caryophyllus aromaticus fructu oblongo*, B. B. Pin. *Caryophyllus aromaticus India Orientalis, fructu clavato monophreno*, Pluk. Almag. Cloves. They are very heating and drying, cordial, cephalic, and stomachic, stop Vomiting, strengthen a weak Stomach, expel Wind, prevent Fainting, and are good in malignant Distempers; the distilled Oil cures the Tooth-ach. They are of a heating, drying, and dissolving Quality, for which Reason they are serviceable in a Lipothymy, Crudities of the Stomach, and the Vertigo, and remove malignant, uterine, and other Disorders.

Cassia Caryophyllata, Offic. *Caryophyllus aromaticus India Occidentalis, foliis et fructu rotundis, dyspyrenis, Seminibus fere orbiculatis planis*, Pluk. Almag. *Amomum aliud quorundam et Caryophyllon Plinii Clusio suspicatum*. The Clove-berry-tree. Both as to Smell and Taste it approaches

proaches to those of Cloves, is cephalic, cordial, and agrees with Cloves in all their Virtues.

The third Sort is, the *Pimenta*, Offic. *Piper Jamaicense*, quibusdam, *odoratum Jamaicense nostratibus*, Raii Hist. *Myrtus arborosa*, foliis *Laurinis aromatica*, *Cocculi Indi Aromatica*, Mus. Regiæ Societatis. *Jamaica* Pepper, or All-Spice. The Fruit, with Water distilled *per Vescam*, yields a very odoriferous chymical Oil, which sinks to the Bottom of Water, like Oil of Cloves; it is the most temperate, mild, and innocent of common Spices, almost all of which it far surpasses, by promoting the Digestion of Meat, attenuating tough Humours, moderately Heating, strengthening the Stomach, expelling Wind, and doing those friendly Offices to the Bowels, which we generally expect from Spices.

Cascarilla. *Cortex Thuris*, Offic. *Cortex Thuris nonnullis dictus, vel Thymiana*, Raii Hist. *Kina Kina Aromatica*, *Palode Calenturas*. *Cascarilla Cortex Elaterii, sive Scacarrilla Officinarum*. *Cortex Peruvianus griseus, sive spurius*, Geoff. Tract. *Indian Bark*. The *Cascarilla*, bears a near Resemblance to the Peruvian Bark, tho' of a somewhat paler Brown, less compact, more friable, of a bitter and somewhat styptic Taste, pungent, and pretty acrimonious to the Tongue, leaving at last a Sensation of Bitterness, mixed with something of an aromatic Nature. In all probability, its resinous and penetrating Parts, divide the ill concocted, thick, and viscid Substance which is the *Fomes* of a Fever. This Febrifuge has this particular Advantage over the Peruvian Bark, that it acts in a smaller Dose, nor requires so long a Continuation. The illustrious Stahl, Physician to the King of Prussia, extended its Use still farther; he prescribed it for severe and convulsive

Coughs, such as those called the *Chin cough*, in which Cases it produces the desired Effects, by inciding, and attenuating the viscid Matter, and consequently it is highly beneficial in those Cases, where the Intention is to assist or augment Transpiration. The Virtues of *Cascarilla* have been experienced in flatulent Colics, and in those hysteric, and hypochondriac Disorders, commonly called *Napours*. But it is to be observed, that when the Intention is to restore and confirm the Tone of any Parts, which have been shock'd, agitated, or strain'd, *Cascarilla* in Substance, ought to be prescribed, it being in this Case necessary, that its earthy and styptic Parts, should perform the Office of Astringents. *Cascarilla* in Substance, is of singular Service in internal *Hæmorrhoids*, which flow with Difficulty, provided the Patient is of a pretty corpulent Habit of Body. This happens, because in such a State, the Skin being relaxed, the *Cascarilla* augments the Transpiration, in consequence of which, the Humours will have more Liberty, and the *Hæmorrhoids* be opened. Perhaps, also, the *Cascarilla*, may contribute to make the *Hæmorrhoids* flow, by restoring and bracing up the Vessels, which contain the *Hæmorrhoidal Blood*, of which Facts, Mr. Boulduc himself was a Witness. But what he observed, as more particularly advantageous in *Cascarilla*, was, the singular Service it did, in the Dysenteries which raged in the Year 1719, whether accompanied with a Fever, or not. He further observes, that whereas *Ipecacuanha*, and other emetic Vegetables, leave a long Indisposition and Weakness in the Stomach, *Cascarilla* speedily restored and confirm'd its Tone and Strength. This Bark, then, has the same Virtues with the *Quinquina* and *Ipecacuanha*, and perhaps excels them

them rather to a greater Advantage than either the one or the other.

Cassia Fistula, Offic. *Cassia fistula Alexandrina*, Raii Hist. *Quauhayobuatli* five *Cassia fistula*, Hern. The Pudding Pipe Tree. The Egyptians never use the Cassia Pods, till they are four Months old; since when young and recent, they are observed not only to be useless, but noxious. They use the Pulp, extracted from the Pod, in the Form of a Bolus or Potion. They are of Opinion, that Cassia exhibited internally, by evacuating and obdusting the hot and parched Parts of the Blood and Humours, cools the Blood and renders it more pure; they, also, by Experience find, that by its Means, the Stomach is disburthen'd of an excrementitious Substance which may prove offensive to it; they also use it with great Success, in Defluxions of hot Humours upon the Lungs, or Thorax, exhibiting it either alone, or mixed with Sugar Candy, or with Oil of sweet Almonds. They find it, likewise, singularly beneficial to the Bladder and Kidneys; because it extinguishes any immoderate Heat of those Parts, scours from thence the Humours, and discharges them by Urine. Hence the frequent Use of it, prevents the Generation of Stones and Gravel. They use the Pulp, in Conjunction with *Agaric*, against immoderate Coughs, Dyspnoeas, Asthmas, and Orthopnoeas. They use it, also, by Way of Plaister, to be applied to the Parts affected in hot Pains of the Joints, the Gout, and hot Inflammations. The Flowers, preserved with Sugar, make an highly beneficial Medicine, for correcting the Heat of the Kidneys, and eliminating the tough and viscid Recrements lodged in the Ureters. Besides, the Flowers are used by the

Egyptians, for alleviating Pains of every Kind, especially those of the Gout. Bontius informs us, that the Use of the Cassia Pulp, is very frequent among the Malaysians, in Disorders of the Kidneys and Bladder, in all nephritic Indispositions, as also in Gonorrhæas contracted by impure Embraces, when it is mixed with the Powder of boil'd Turpentine. It is, also, proper in febrile Heats, and extinguishes Thirst. Schulzius says, it is a Purgative; but because in Substance a large Dose of it is to be taken, and because it is observ'd to weaken the Stomach, it is rarely exhibited at present with us. But if the recent Extract is to be used, it may most properly be exhibited, with the Addition of some Carminative, such as Anise, or Fennel. Hypochondriac and hysteric Patients, those who are afflicted with a Weakness of the Stomach and Flatulencies, and such as are subject to the Colic, ought to abstain from Cassia, as also pregnant Women. The *New London Pharmacopœia* introduces this into the *Electuarium e Cassia*, & *Electuarium Lenitivum*. The Cassia Lignea is a Species of Cinnamomum.

Cassumuniar, Offic. alias *Rysagon*. An *Zerumbeth* seu *Zingiber rubrum*, *sylvestre*, *Ternatense*. Camel. Syllab. *Casumunar*. It is very much commended as an excellent nervous Medicine, and good for the Palsy, Convulsions, Colic, Gripping of the Bowels, as also hysteric Affections. The Root is said to be moderately heating and astringent; for which Reason, it is recommended, for corroborating the Nerves, recruiting the vital and animal Spirits, strengthening the Stomach, and expelling Flatulences. It is prescribed in Apoplexies, convulsive Motions, Palsies, Tremors, hysteric and hypochondriac Disorders, Vertigoes and Gripes.

Gripes. It is highly extolled for a Loss of Memory, and esteemed a Corrector of the *Peruvian Bark*.

Castanea. There are two Species of Chestnuts, to which the same Virtues are ascrib'd, as the *Castanea*, Offic. *Castanea sativa*, Boerh. Ind. A. The Chest Nut. The other is, the *Castanea*, Ind. Med. *Castanea Sylvestris quæ peculiariter Castanea*, C. B. Pin. *Castanea vulgaris*, Park. Theat. The Wood Chest Nut Tree. Chestnuts fatten and nourish, but they bind also, and sometimes generate Wind. The Meal mixed with Honey, or the Chestnuts themselves roasted, and work'd up with Honey and Flowers of Sulphur, make a good Electuary, for those who spit Blood, or cough very much. The Decoction of Chestnuts, or their Shells roasted, assuage the Flux of the Belly, as does, also, the little Skin under the Shell. An Emulsion made of Chestnuts, Poppy Seeds, and Barley Water, assuages the Heat of Urine. Chestnuts are sweet, a little styptic; and, it is evident, that the Fruit partakes somewhat of the Nature of Alum and Sulphur.

Cedrus folio cupressi, major fructu Flavescente, C. B. Pin. *Juniperus major Dioscoridis*, Clus. H. It is said to be of a heating and diuretic Quality, like common Juniper. According to *Dioscorides*, the Berries are moderately heating, astringent and beneficial to the Stomach. When exhibited in a Draught of a proper Liquor, they are highly efficacious against Disorders of the Breast, Coughs, Inflammations, Gripes, and the Wounds inflicted by Serpents. They provoke Urine; and for that Reason, are proper, for Patients afflicted with Ruptures, Convulsions, and hysteric Fits. The Leaves contain a certain Degree of Acrimony; for which Reason, either they themselves, or their Juice,

may properly be drank in Wine, against the Bites of Vipers, or the Parts affected may be anointed with the same Preparation. The Country People of *Provence* in France, apply the Leaves bruised, to Carbuncles, in Order to put a Stop to their Increase. From the Berries, or the recent Wood, boil'd in Must, is prepared the *Vinum Cedrinum*, or Cedar Wine, according to *Pliny*. *Dale* informs us, that he saw a Gentleman who expressly affirmed, that in *Carolina*, this Tree yielded a Gum, so like the true Olibanum, that when he accidentally mixed some Particles of it with Olibanum brought from *Europe*, they so much resembled each other, that they could neither be separated nor distinguished. Hence he concludes, that this is the Tree, which produces the Olibanum.

Cedrus, Offic. *Cedrus Libani*, Ger. *Cedrus magna conifera Libani*, Park. Theat. Cedar of Libanus. The Wood of this Tree, is said to prevent the Putrefaction of all animal Bodies. The Saw-dust of it, is thought to be one of the Secrets, used by those Mountebanks, who pretend to have the Embalming Mystery. This Wood is, also, said to yield an Oil, which is famous for preserving Books and Writings; and the Wood is thought by *Lord Bacon* to continue above a thousand Years sound.

Celery. This Plant is possess'd of the same Virtues with the *Apium* of the Shops. Those who are fond of venereal Intercourses, love Brandy distilled from the Seeds of Celery. The Root, which is extremely white, and the interior Part of the Stalk, when well wash'd and cut into Slices, are used as a Salad, and thought an uncommon Delicacy, in the Winter, and latter End of Autumn. The Root is, also, boiled with Flesh and Fish, in Order to render them

more delicious. Some are fond of the Seeds prepared with Vinegar.

Celtis, Offic. *Celtis fructu nigricante*, Boerh. Ind. *Lotus Arbor fructu Cerasi*, J. B. The Nettle Tree. This Fruit, is used in Medicine, and is astringent, binds the Belly, but has least of these Qualities when ripe. The Decoction thereof is good for a Dysentery, and for Women labouring under an immoderate Flux of the Menfes.

Centaurium majus, Offic. *Centaurium majus vulgare*, Park. *Centaurium majus folio in Laciniis plures diviso*, Boerh. Ind. A. Great Centaury. This Plant flowers in July. The Root, which is the only Part used, is drying and binding, and good for all Kinds of Fluxes, stops Bleeding, either at the Nose, Mouth, or any other Part, is of great Use to heal Wounds, and according to *Pliny*, derives its Name from the Centaur *Chiron*, who when shot by an Arrow of *Hercules*, cured himself, by the Application of this Plant. It is, also, reputed to open Obstructions of the Liver, and to corroborate that Part; it is also used in Hernias.

Centaurium Minus, Offic. *Centaurium minus vulgare*, Park. Theat. *Centaurium minus flore purpureo*, J. B. Common Centaury. It flowers in June and July; and is of a very bitter Taste, and of an aperitive cleansing Faculty, opens Obstructions of the Liver and Spleen, provokes Urine and the Menfes, alleviates the Jaundice and intermitting Fevers, strengthens the Stomach, and destroys Worms; outwardly, it is used in Fomentations against Swellings and Inflammations. It is an Ingredient in the *Theriaca Andromachi*.

Cepa, Offic. *Cepa vulgaris floribus, & tunicis candidis & purpurascens*, Boerh. Ind. A. *Cepa rubra & Alba rotunda & longa*, J. B. O-

nions. They are somewhat windy, but otherwise very wholesome, for those who abound with cold and moist Humours, and are good against Coughs and Diseases of the Breath. We are convinced by Experience, that Onions, especially when externally applied, are possess'd of very singular medicinal Virtues; for nothing is of greater Efficacy in soft'ning hard Tumours, and maturing venereal Buboës, than roasted Onions, especially when applied in Conjunction with Figs. They, also, afford speedy Relief, if applied to the Pubes of Children labouring under a total Suppression of Urine. There is, also, in the various Species of Onions, a certain subtle caustic Salt, of a highly penetrating and blistering Quality, which, when applied immediately to the nervous Parts, excites violent Pains, and sometimes an Inflammation, tho' Onions are daily used internally without producing any bad Effects. They are very diuretic.

Cerasus Rubra, Offic. *Cerasus Anglica*, Park. Theat. *Cerasus sativa fructu Rotundo, Rubro & Acido*, Tourn. Inst. The red Cherry Tree. The Fruit is cooling, drying, and astringent, and corroborates the Heart and Stomach; hence they are useful in allaying feverish Heats and Thirst; the Kernels are good to dissolve the Stone. The Gum of the Tree is likewise accounted lithontriptic. Cherries are esteem'd a very salutary and agreeable Fruit. The Juice of them, when perfectly ripe, is saponaceous and highly solvent, and if taken in large Quantities, and those frequently repeated, especially when boil'd or baked, it is capable of curing many obstinate chronical Distempers, and taking away the obstructing Matter by a salutary Diarrhœa.

Cerasus acida nigricans, Ind. Med. *Cerasus fructu acido, serotino, succi sanguis-*

sanguinei, Tourn. Inst. *Cerasa acida nigricantia solidiora tardius maturiscentia*, J. B. The Morello Cherry. The Fruit preserv'd, and the Rob of the Juice, are used, and agree in Virtues with the red Cherry.

Cerasus nigra, Offic. Ger. Black Cherry-tree. It flowers in April, and the Fruit is used in Medicine, which is esteem'd temperate and cephalic, and particularly efficacious in Disorders of the Head, as Apoplexy, and Palsy. The Stones of black Cherries, with their Kernels baked and powdered, are said to be extremely diuretic, but the Kernels have been lately said to yield by Distillation, an Oil equally poisonous with that of the Laurel: Hence black Cherry Water has got into some Disrepute, tho' as far as I can learn, without any Foundation from Experience.

Padus, Offic. *Cerasus Ramosa sylvestris fructu non edili*, C. B. Pin. *Cerasus Avium racemosa*, Park. Theat. Birds Cherry. The Fruit is used to hang about the Necks of Children, as a Cure for the Epilepsy.

Cerasus sylvestris amara, *Mabaleb putata*, Raii Hist. Rock-Cherry. This grows upon rocky Mountains, and the Kernels are said to be heating and emollient.

Chamædrys minor Repens, C. B. P. *Chamædrys vulgaris*, Park. Theat. *Chamædrys vulgo vera existimata*, J. B. Germander. The Leaves of this Plant are bitter and aromatic, and contain Principles, different from those of the small Centaury. The Salt of Germander, is not different from that which is naturally in the Earth, which is a Mixture of marine Salt, Nitre, and Sal Ammoniac. It is acrid, very bitter, and aperitive. It is probable, that what is found in this Plant, has lost its Acrimony by the Mixture of

a great deal of essential Oil, which renders the Germander aromatic. It is febrifugous, stomachic, aperitive and diaphoretic. Some infuse cold, over Night, a Handfull of its Leaves in a Glass of white Wine, with Half a Dram of vegetable Salt, and give the Infusion to drink fasting, for the Green Sickness. Some also prepare an Extract of its Leaves and Flowers, and give a Dram of it, with a Drop or two of the Oil of Cinnamon, and make an Infusion of the Leaves like Tea, principally for the Gout and Sciatica. They enter into the Composition of the Powder of the Prince of Mirandola, which is esteemed a great Specific in such Disorders.

Chamælea tricoceos, C. B. Pin. *Chamælea*, Dod. Boerh. Ind. Alt. Widow-wail. Ray informs us, that the Virtues of *Chamælea*, are in a great Measure, the same with those of the *Laureola*, or Spurge Laurel; but as it is dubious, whether it is really the *Chamælea* of the Antients, we shall not ascribe to it the Virtues, which *Dioscorides* and *Pliny* attribute to that Plant. But says *J. Bauhine*, the Juice of the whole Plant, is much used at present, especially at *Montpelier*, where according to *Rondeletius*, the Apothecaries keep it, expressed and inspissated; in Imitation of whom, says he, I have often with great Success exhibited one or two Drams of the recent inspissated Juice by itself, and oftener in Conjunction with other Hydragogue Cathartics. But it does not produce so large a Discharge of the peccant Matter, nor operate with such a Degree of Violence, as the Spurge Laurel, the *German Mezereon*, and the *Gratiola* generally do. Sometimes, it operates little or none at all, except when mixed with some mild and gentle Cathartics. When exhibited to Children, it neither excites Gripes

nor Vomiting; but only discharges Water and Serum. When applied to the Pubes and Abdomen of dropfical Patients, no Medicine is more effectual for provoking Urine, in which Manner, says he, *Rondeletius* used it with Success.

Chamæmelum vulgare, Leucanthemum Diofcoridis, C. B. Pin. *Chamæmelum vulgare*, Offic. *Chamæmelum elatius, foliis obscure virentibus, semine Nigro*, Pluk. Almag. Wild or Dogs Chamomile. It is found in uncultivated Places and among Corn, and flowers in June. The Herb and Flowers, are said to be possessed of the same Virtues with those of the common Camomile. This Plant is bitter, aromatic, and seems to contain some SalAmmoniac, loaded with a great deal of Acid, and involved by a great deal of Sulphur and Earth. It is aperitive, diuretic, lenifying and febrifugous. The Powder of its Flowers, were used in *Diofcorides's* Time, to cure intermitting Fevers. *Riverius* prescribed it on the same Occasions, and it is still the common Febrifuge of the *Scotch* and *Irish*. The Infusion of its Tops, with those of *Melilot* give great Ease, to such as are tormented with a nephritic Colic, and Retention of the Urine. It asswages the acute Pains of Women newly brought to bed. *Simon Pauli* recommends a strong Infusion of Chamomile Flowers in Wine, taken by Spoonfulls, while a Hogs bladder filled with a Decoction of the Herb, is applied hot, and renew'd as Occasion requires, in pleuritic Cases. It is also used in lenifying and resolving Clysters, Fomentations, Cataplasms, and Baths for the Gout, Sciatica, and the Piles. The Oil of Chamomile made by Infusion, is very good in the same Cases. A Liniment of an equal Quantity of Chamomile, and Oil of *St. John's Wort*, with camphorated Spirit of Wine, in which a folded Cloth hath been dipt, and

applied very hot to the affected Part, is good in Rheumatisms.

Chamæmelum nobile, five Leucanthemum odoratius, C. B. P. *Chamæmelum odoratissimum repens flore simplici*, J. B. Chamomile. It digests, relaxes, mollifies, alleviates Pain, and excites a Discharge of the Menfes and Urine. Hence it is singularly beneficial in Colics, flatulent Spasms and Convulsions. It is used externally in paregoric emollient and maturing Cataplasms, and in Clysters. Among all Plants none are more efficacious than Chamomile Flowers, for Baths, intended to remove nephritic Pains. Doctor *Morton* asserts, that he was told by an eminent Physician, that he had found Chamomile Flowers, reduc'd to a fine Powder, and taken at due Intervals, as infallible in curing intermitting Fevers, as the Peruvian Bark; and farther, that he himself tried it, in three Instances, in every one of which it succeeded. *Frederic Hoffman* asserts, that no Simple in the *Materia Medica*, is possessed of a Quality more friendly and beneficial to the Intestines, than Chamomile Flowers; for which Reason says he, I have, instead of all other Ingredients, hitherto with great Success, prescrib'd their Use in Clysters, adding when there is a Necessity for it, Oil of Sweet Almonds; and for Patients of the poorer Sort, Linseed Oil, or Oil of Turnep-seeds; or for evacuating the Fœces, a sufficient Quantity of common Salt, which for its stimulating Quality, is of more Service than the whole Train of laxative and purgative Extracts and Electuaries, which may be very well left out of Clysters. These Flowers make an excellent Cataplasm, for discussing, softening, and maturing Abscesses. When boil'd in Milk, and put into a Bladder, either alone, or in Conjunction with the Flowers of Elder, Mallows, Yarrow, or Saffron, they are highly efficacious in al-

alleviating Pains and softening Tumours, if the Bladder is applied to the Part affected. I have learned from long Experience and Practice, that Brandy, distill'd from the Tops of Yarrow, Chamomile Flowers, Anise-seeds, and *Ethiopic* Cumin, is of more Efficacy in discharging Flatulencies, than any of the other so much extoll'd carminative, and antispasmodic Preparations. The last *London Pharmacopœia* directs an essential Oil from this Plant, and it is an Ingredient in the *Decortum commune pro Clystere*; *Fotus commune*; and *Oleum viride*.

Chamæmelum nobile, flore multiplici, C. B. *Chamæmelum repens odoratissimum perenne flore multiplici*, Chab. Double Chamomile. This possesses the same Virtues as the former.

Chamæmelum fœtidum, C. B. P. Boerh. Ind. A. *Chamæmelum annuum præcox fœtidum semine aureo*, Hist. Oxon. May Weed. This Plant is acrid and bitter, smells like Bitumen, and contains a great deal more of fetid Oil than the common Chamomile. Fomentations of May-weed are very good for the Vapours, according to *Tragus*; at *Paris* they use it to assuage the Pain of the Piles, but 'tis rarely used, tho' some Authors commend it against Vapours and hysteric Fits.

Chamæmorus, Offic. *Vaccinia Nubis*, Ger. *Chamæmorus Anglica*, Park. Theat. Knot Berries, Cloud Berries. It is most efficacious in the Scurvy, in so much that it is almost incredible what Number of Cures are perform'd by it.

Chamæpitys, lutea vulgaris, sive folio bifido, C. B. P. *Chamæpitys Iva arthritica*, Offic. *Chamæpitys vulgaris odorata, flore luteo*, J. B. Ground Pine. The Leaves of Ground-pine, drank in Wine for seven Days together, are said to cure the Yellow Jaundice; for forty Days together in

Hydromel, the Sciatica. They are likewise prescribed for Distempers of the Liver, Difficulty of Urine, and as a Specific in Disorders of the Kidneys; they also help the Gripes. The Inhabitants of *Heraclea* in *Pontus*, used this Herb, as an Antidote for those who had drank the Decoction of *Aconitum*. Ground-pine is hot and dry, warming and strengthening to the Nerves, helps the Palsy, Gout, Sciatica, Rheumatism, Scurvy, and Pains of the Limbs. It is a strong Diuretic, opens the Obstructions of the Womb, and powerfully promotes the Menfes, in so much that it is forbidden to Women with Child, for fear of an Abortion; it is bitter and aromatic, and contains some oily volatile Salt, loaded with a great deal of Sulphur and Earth; for by a chymical Analysis, it yields several acid Liquors, a little urinous Spirit, and a great deal of Oil, but more Earth. It is no Wonder, then, if this Plant restores the ordinary Course of the Spirits, and Liquids in the Nerves, and capillary Vessels; whence it is very good in nervous Affections. It is diuretic, emmenagogue, and dissipates the Cause of the Gout. Drink its Infusion in Wine, or make a Ptisan of it with *Germander*.

Chamæpitys Moschata foliis serratis an prima Dioscoridis, C. B. Pin. *Chamæpitys altera*, Offic. *Chamæpitys odoratior*, Park. Theat. *Chamæpitys tertia Dodonæi*, Ger. E. mac. Italian Ground Pine. This is common in *Italy*, and flowers in *June*. *Dioscorides* says, that the two last, are possessed of the same Virtues as the first, tho' in a weaker Degree.

Chelidonium magis vulgare, Park. Theat. *Chelidonium majus*, Offic. *Papaver corniculatum luteum Chelidonia Dictum*, Raii Synop. Celandine. Celandine is bitter, acrid, and burning, but more especially the Root, which yields

yields more of Orange colour'd Juice, than the other Parts of the Plant; it smells like rotten Eggs, which makes some believe, that its Juice is Phagedenic, and something like the Liquor which results from the Mixture of the Solution of sublimate, and Lime Water, or Milk which has boil'd sometime with an acrid Salt. Taken inwardly it is very aperitive and cleansing, opens all the Obstructions of the Spleen, and Liver, and is of good Service in the Jaundice and Scurvy. For the Dropsy some infuse for twenty four Hours, one Ounce of the Root of Celandine, and half an Ounce of the Tincture of Steel, in a Pint of White-wine; and straining the Infusion thro' a Linnen Cloth, give the Patient three Ounces of it twice a Day.

Chelidonium minus. The lesser Celandine. *Chelidonium minus*, Offic. *Scrophularia minor* sive *Chelidonium minus vulgo dictum*, J. B. Pile Wort. This Herb is reckoned good for the Piles, to ease their Pains and Swellings, as also to stop their Bleeding, the Roots being taken inwardly, and outwardly applied in an Ointment made of the Leaves and Roots. Some greatly commend it for the Jaundice and Scurvy, but more especially that in the Mouth; it is reckoned a Strengtheners of the Gums, and a great Preserver of the Teeth. It is also esteem'd an excellent Remedy, either internally taken, or externally applied for Hernias in Children.

China, Offic. *China Radix*, C. B. *Pin. China Radix*, Raii Hist. *China Root*. This is a Root of a pale red Colour externally, but white within, of a farinaceous, earthy, and somewhat astringent Taste, but without any Smell. It is supposed to be the Root of a certain *Smilax*, call'd *Lampatam* in *China*, where it grows plentifully. There is, also, in *America*, and *New Spain*, a Root

nearly similar to this, which they call *West Indian China*, but is inferior to that which comes from *China*, and the neighbouring Countries. This Root first began to acquire an uncommon Reputation in *Europe*, in the Time of *Vesalius*, which was about the Year 1535. The Decoction of the Root for the venereal Disease, became famous, and was prepared in the following Manner:

Take an Ounce of fresh *China* Root, cut into thin Slices, let them macerate for twenty-four Hours in six or eight Pints of tepid Spring-Water, which is to be boiled in a large earthen Pot close cover'd, over a slow Fire to the Consumption of a Third. Then strain the Decoction, and set it aside in a glass Vessel stopp'd, keeping it tepid for daily Use.

The Patient, being prepar'd by Purging and Bleeding, took ten or twelve Ounces of this Decoction every Day, early in the Morning, and compos'd himself in Bed well cover'd with Cloaths, to sweat for two or three Hours: After this, wiping off the Sweat, he was permitted to rise and walk about the Room, and after ten or twelve Days, if the Weather was mild, to walk Abroad, taking Care to keep himself warm. He was more indulg'd with Respect to Diet, than if he had used a Decoction of *Guaiacum*; for he was allow'd to eat Chickens, or Capons roasted or boil'd without any Salt. But he was wholly to abstain from Wine, and to use nothing for his ordinary Drink, but a warm Decoction of *China Root*. This Regimen was persisted in for four or five and twenty Days together, after which, the Cure was thought to be perfected. If the Patient was subject

to be coſtive, they added ſome Senſa to the Decoction, or adminiſtered an emollient Clyſter every other Day. What contributed greatly to raiſe the Character of the China Root was, its affording conſiderable Relief to the Emperor Charles V, when afflicted with the Gout, and Cachexy. This Root, however, ſoon loſt its high Reputation; for *Vesalius*, in a Letter publiſh'd in 1542. aſſures us, that Decoctions of China Root, were far inferior to thoſe of *Guaiacum*, for Excreſcences and Tumors of the Bones, and for the Cure of malignant venereal Ulcers. Doctor *Aſtruc* informs us, that in venereal Caſes he could produce no happy Effects by Means of this Root. It is by ſome thought to be of Service in the Gout, Sciatica, œdematous Tumors, King's Evil, Imbecility of the Stomach, Hemicranias, and in Ulcers of the Bladder and Kidneys.

China Occidentalis, Pharmacop. *China ſpuria Nodosa*, C. B. Pin. American China. This is poſſeſs'd of the ſame Virtues with the former, but is not eſteem'd ſo good.

Chondrilla prima, Offic. *Chondrilla cœrulea altera Cichorei ſylveſtris folio*, C. B. *Lactuca ſylveſtris perennis purpureo cœruleo, latiniato longo folio*, Hiſt. Oxon. Gum Succory. It grows in uncultivated Places in Germany and Italy, and flowers in Summer according to *Dioſcorides*. *Dale* is of Opinion, that the Herb is the *Chondrilla prima* of *Dioſcorides*. About the Branches of this Plant, there is a Gum found reſembling Maſtich, about the Bigneſs of a Bean, which bruifed with Myrrh, and applied in Linen to the Quantity of an Olive, provokes the Menſes. The Herb with the Root is bruifed, and with an Addition of Honey is made into Troches, which diluted and mixed, deterge the *Alphi*. Drank in Wine it cures the

Bite of a Viper, and the Juice boild and drank with Wine, or alone, ſtops a Loofeneſs, according to *Dioſcorides*.

Chondrilla altera, Offic. *Chondrilla Juncea*, Ger. Gum Succory with yellow Flowers. It grows in ſandy Soils, in Germany and Italy, and flowers in June. The Stalks and Leaves are ſaid to have a digeſtive Faculty.

Cicer Album, Offic. *Cicer ſativum Album*, Park. Theat. *Cicer arietinum*, J. B. White Chiches. The Cicer is a Kind of Pulſe, ſown in Italy, France, and other warm Climates, from whence the Seed is brought to us. They flower in June, and the Fruit is ripe in July. They are, alſo, cultivated in the Gardens of the Curious, and the Seeds are uſed in Phyſic. They are eſteemed flatulent, but are ſaid to ſtimulate to Venerſy; they deterge, open, incide, digeſt, and are ſaid to diſſolve the Stone; but are prejudicial when the Bladder or Kidneys are exulcerated. The Decoction is ſaid to be good in a Jaundice, to deſtroy Worms, to provoke the Menſes, and to expel the Fœtus. In Cataplaſms they are eſteem'd efficacious in the Cure of Tetters, Ringworms, and Parotides, to diſcuſs Inflammations of the Teſticles, and to consolidate malignant Ulcers.

The *Cicer nigrum*, and *Rubrum*, differ in nothing from the *Album* but in the Colour of the Flower, which is of a Purple Colour, and the Fruit of a reddiſh Brown.

Cicer Sylveſtre, Offic. *Cicer ſylveſtre majus*, Park. Theat. *Aſtralagus luteus perennis, ſiliqua gemellâ, rotunda veſcam referente*, Boerh. Ind. A. Wild Chiches. They grow wild in Fields, and in uncultivated Places in Italy, and other Countries, and flower in the Summer; the Seed is uſed, which is of a heating, drying, deterſive and aperient Quality, and

agrees with the preceding Cicers in Virtues.

Cichorium latifolium, five *Endivia vulgaris*, Boerh. Ind. A. *Endivia scariola*, Intybus, Offic. Intybus *sativa latifolia*, five *Endivia vulgaris*, Endive. It grows in Gardens, flowers in June, and when the Seed is ripe the Root perishes. Endive is much used in Salads. It is cooling and moistening, opens Obstructions of the Liver and Spleen, is efficacious against the Jaundice, provokes Urine, and greatly cools a hot Stomach; its Seed is one of the lesser cold Seeds.

Cichorium sylvestre five *Officinarium*, C. B. *Cichorium agreste sylvestre*, Offic. Wild Succory. It grows in Lanes and Hedge Sides, and flowers rather later than the *Garden Succory*. The Virtues of the *Wild* differ but little from those of the *Garden Succory*. A Water distilled from the Flowers, is esteem'd good in Inflammations of the Eyes. The Roots and Leaves, are aperitive, diuretic, and cooling. They seem to cool only by removing the too long obstructed Humours of the Bowels. They are prescribed in Broths, Ptisans, Apozems, and Clysters. The Juice procures Expectoration in Defluxions of the Breat. The Extract, has the same Virtues and purifies the Blood. The simple or compound Syrup, is a good Aperitive, especially if two Drams, or half an Ounce of Tincture of Steel be mixed with an Ounce of it. The Conserve of its Flowers is used on the same Occasions, in aperitive Boluses and Electuaries. These Electuaries are of great Service in the Cachexy, Dropsy and hypochondriac Disorders, intermitting Fevers, and troublesome Heats of the lower Belly.

Cichorium, Ger. Garden Succory. It is planted in Gardens, and flowers in June. The Root, Leaves, Flo-

wer and Seeds are used, its Seed is one of the four smaller cold Seeds. The ancient Botanic Writers generally affirm, that Succory is cold, but its Bitterness manifestly shows it to be hot; however it is aperitive and diuretic, opens Obstructions of the Liver, and is good for the Jaundice. It provokes Urine, and cleanses the urinary Parts of slimy Humour that may stop their Cavities.

Cicuta, Offic. Ger. *Cicuta major vulgaris*, Park. Theat. Hemlock. It grows in Fields and by Hedge Sides, and among Rubbish, and flowers in Summer. Hemlock is used outwardly, in Swellings and Hardness of the Liver and Spleen. Its Leaves are very lenifying and resolvent; when boil'd with Milk, they are apply'd with good Success to the Piles, and the Parts afflicted with the Gout. A Cataplasm of Hemlock Leaves bruised with some Snails, and work'd up with the resolvent Meals, is excellent for Inflammations of the Testicles, for the Gout and Sciatica. The Hemlock Plaister is a good Resolver of scirrhus Tumors.

Cicuta latifolia foetidissima, *Seseli Peloponense*, Offic. *Seseli Peloponnesiacum recentiorum*, Park. Theat. Great broad leaved Hemlock, or Bastard Hemlock. It grows plentifully in the Country of the Grisons. The Root and Seed is in Use. Dale says, that this Plant is possessed of the same Virtues as the *Seseli Massiliense*, according to *Dioscorides*. But as Botanists agree, that this Plant is erroneously taken for the *Seseli Peloponense* of *Dioscorides*, we must not attribute the Virtues of the former to this.

Cinara hortenensis foliis non aculeatis, C. B. Pin. Offic. The Artichok. Artichoks have the Reputation, of promoting venereal Inclinations, to a very great Degree. The Stalks preserv'd in Honey, are said to be an excel-

excellent Pectoral, but they should be first blanched, like Celery. The common Leaves boil'd in white Wine Whey, are much commended in the Jaundice, as also the Juice of these Leaves

Scolymus sylvestris, Offic. *Scolymus Dioscoridis*, Park. Theat. *Carduus sive Cinara sylvestris latifolia*, Hist. Oxon. Wild Artichok, or Cardonet. This grows in Italy and France. The Part in Use, is the Flower, which is thought, by the Vulgar, to prevent Sterility, and to preserve the Fœtus in the Womb, to the just Period of Maturity. The Flowers coagulate Milk.

Cinnamomum, Offic. Park. *Cinnamomum sive Canella Zeilanica*, C. B. Pin. Raii Hist. The true Cinnamon Tree. What is at present called Cinnamon in the Shops, is an aromatic Bark, of a reddish Colour, woody, friable, in Pipes of a different Thickness and Length; of a sweetish, hot, pungent, and somewhat astringent Taste; of a fragrant Smell, appropriated to various Uses, both in Medicine and Cookery, and gather'd from the *Arbor Cinnamomifera Zeilanica*. These Trees grow in several Parts of the East Indies, but none yield such good Bark, as those of Zeilan. From an Incision made in the Root of this Tree, there drops a Liquor, which smells like Camphire. Besides, Camphire, now-and-then ouſes from the Bark of this Root, in Form of white Drops, which insensibly coagulate into white Grains. This Species of Camphire, by the Indians call'd *Barror*, is also obtain'd by Distillation, from the Bark of the Root dried, bruised, and immersed in Water. The Physicians of Zeilan, use this distill'd camphorated Water with Success, exhibiting a Spoonful of it at proper Intervals, as a Sudorific, in continual and malignant Fevers. They, also, mix it with common

Water against Defluxions. Externally, it is applied with Linen Cloths, for discussing œdematous and watery Tumors. The Leaves of the Tree, in Distillation, yield an Oil, of a bitterish Taste, resembling Oil of Cloves, to which a little of the Oil of Cinnamon has been added. This is call'd *Oleum Malababri*, and is celebrated as an instantaneous Remedy, against Pains of the Head and Stomach, and several other Disorders. The Oil of the Leaves, made by boiling them with common Oil, is on Account of its healing, anodyne and resolvent Quality, highly recommended for surgical Intentions, in the Composition of Liniments, for Instance, Cataplasms, and Clysters; as, also, in Colics, Gripes, Tympanies, and other windy and watery Tumors. From the Flowers, is obtain'd by Distillation, a fragrant Water, which when exhibited by Spoonfuls, at proper Intervals, corroborates the Stomach, and immediately alleviates colic Pains, arising from Cold. A Conserve is, also, made of the Flowers, which is highly commended against Diseases arising from a cold Cause. From the Kernels of the ripe Fruit, is expressed an Oil, which in some Measure resembles Suet, and is made up in Cakes. This is by the Indians used for several Disorders, both internally and externally. In the Shops, that Cinnamon is generally accounted best, which is lately gathered, of a yellowish Red externally, and internally of a somewhat darker Colour; which is smooth, easily broken, of a fragrant Scent, and pungent Taste. That which is small, is preferable to the large Kind, and the long Pipes are esteem'd more valuable than the short. Some adulterate it with the Bark of the Caper Bush, Tamarisk, or the Cassia Lignea; but this Piece of Fraud is easily detected.

rected. *Bauhine* expressly affirms, that whatever Virtues the Antients ascrib'd to their Cinnamomum and Cassia, justly belong to our Cinnamon; since it is of an aromatic, stimulating, and corroborative Quality. Hence it is classed among the stomachic and uterine Medicines, affords singular Relief to Women afflicted with a Loss of Strength, a lax State of the Fibres, or a Suppression of the Menfes. Tho' Cinnamon is an excellent Cordial, and highly beneficial in Palpitations of the Heart; yet it has, by being too often used, been found to bring on the same Disorder, in which Case, Acids are the most effectual Means of Relief. Tho' 'tis highly proper, in some Disorders incident to pregnant Women; yet in these Cases *Etmuller* justly advises the cautious Use of it; because it powerfully irritates the Uterus, to discharge and expel the Fœtus. Of half an Ounce of the best Cinnamon, infused in a close stopp'd Vessel, with two Pints of boiling Water, is prepar'd an highly grateful Drink, which recommends itself, not only on Account of its Smell and Taste, but, also, on Account of its analeptic, stomachic, and moderately astringent Quality in Fluxes, as, also, in a Weakness of the Heart, and Stomach. The styptic Quality of the Decoctions of Cinnamon, is sufficiently evinc'd by *Doctor Hales*, in his *Statical Essays*. The essential Oil is yielded with the Water, in Distillation, and subsides to the Bottom, as being specifically heavier. It is of an inflammatory and corrosive Nature, whether externally applied, or internally exhibited. It is by Reason of its acrid and caustic Nature, highly celebrated as an excellent Medicine in a deep seated Caries of the Bones. *Juncker*, in his *Conspectus Therapiae*

Generalis, tells us, that distill'd Oil of Cinnamon, is an excellent Medicine, for stopping the Progress of Mortifications. *Tulpius*, also, in *Obs. Med.* informs us, that in Order to separate the carious Parts of Bones, he never knew a more effectual Medicine, than Oil of Cinnamon, mix'd with Oil of Sublimate. *Boerhaave* informs us, that it is of a restorative Quality, in Cases where Strength is impair'd, in Women during Gestation, hard Labour, or after Delivery, when there is no Inflammation nor Rupture of the Vessels. He, also, says, that it is good in Disorders of the Uterus, arising from a cold and mucous Phlegm. It may, also, be added to Purgatives, not only with an Intention to render them more palatable, but, also, to prevent Flatulences and Gripes. It may, also, be very properly added to Ointments and Balsams, not only for its fragrant Smell, but, also, on Account of its resolvent, discutient, and heating Qualities. Six Drops of it may be given in Substance, either in a poach'd Egg, sweet Wine, or Broth prepar'd with Flesh, but more properly dropp'd upon Sugar. It is used in the *Aqua Cinnamomi*; *Aqua Spirituosa Cinnamomi*; *Spiritus Lavendulæ compositus*; *Vinum Chalybeatum*; *Tinctura Thebaica*; *Tinctura Aromatica*; *Tinctura Cinnamomi*; *Tinctura Japonica*; *Tinctura Stomachica*; *Syrupus Cydoniorum*; *Syrupus Scilliticus*; *Syrupus e Spina Cervina*; *Confectio Alkermes*; *Pulvis Ari compositus*; *Pulvis e Bolo compositus sine Opio*; *Pulvis e Sena compositus*; *Species Aromaticæ*; *Species e Scordio sine Opio*; *Confectio Cardiaca*; *Confectio Paulina*; *Mithridatium*; *Theriaca Andromachi*; *Emplastrum Stomachicum*.

Another Species of the Cinnamomum, is called *Cassia Lig-*
nea

nea, Offic. Hern. *Cassia Lignea*, Officinarum, Park. Theat. *Canella Malabarica* & *Javensis*, Jons Dendr. The *Cassia Lignea* Tree. This Bark of the Cinnamon bearing Tree, produced in *Malabar*, *Sumatra*, *Java*, and the *Philippine Islands*, is brought into *Europe*, in small Pipes, like the *Ceylonian* Cinnamon, but is of a darker and more rusty Colour, more hard and compact Texture, of a more languid Smell, of a sweet mucilaginous and less hot Taste. That Sort of this Bark, is reckon'd best, which is small, of a purplish Colour, easily broken, fragrant, acrid, of a sweetish Taste; because it then abounds with a volatile oleous Salt, sheath'd up in a vast Quantity of mucilaginous Substance, and therefore operates less powerfully on the human Body, and is greatly proper, where the Intention is only moderately to heat, open, resolve, and strengthen. It, also, obtunds the Acrimony of the Humours, by its mild and balsamic Mucilage. An Infusion of it, is by some recommended in Disorders of the Throat, and is also, said to be beneficial in Diseases of the Uterus. Its Virtues, are the same with those of the *Ceylonian* Cinnamon, tho' somewhat weaker and less aromatic. It is rarely prescribed by Physicians, in any other Preparations than those which come under the Denomination of Antidotes.

A third Species, is the *Cassia Lignea communis*, Pharmacopolis. *Cassia Lignea fusca Aromatica*, C. B. Pin, *Arbor canellifera Indica cortice accerrimo, viscido seu mucilaginoso, qui Cassia Lignea*, Officinarum, Breyn. Prod. The common *Cassia Lignea*. This Bark is somewhat thicker than Cinnamon, and is of a fainter Smell and Taste, of a more reddish Colour and harder Substance. It is brought from the *East Indies*, and is frequent in the Shops.

Citream. Of this there are two Species. The *Citream vulgare*, Tourn. Inst. *Malus Citria*, Offic. *Malus Medica sive Citria*, Park. Theat. The Citron Tree. And the *Citream, Medulla dulci*. The first of these, is principally used in Medicine. It is esteem'd beneficial, in Cases where mortal Poisons have been drank, and in Order to sweeten the Breath; for if any one squeezes the Juice of the Citron Peel into his Mouth, and swallows it, after being boil'd in Broth, or any other Liquor, it procures a sweet Breath. The dry'd and fresh Citrons used before Meals, are said to resist all Poisons. *Dioscorides* says, that the Seeds of the Citron, drank in Wine, resist Poison, render the Body soluble, procure a sweet Breath, and that they are principally used by Women, against that Species of Disorder, call'd *Malacia*. *Pliny* tells us, that the Seeds when exhibited in Vinegar, are good against a Weakness of the Stomach. The Flowers of this Tree, are preserved in Sugar, and used as a Sweetmeat, they are of a cordial Nature, and generally prescribed in Elestuaries. *Guz Patin*, a celebrated Physician, highly extolls this Fruit, gives it the Preference to some of the Shop Cordials, and affirms, that in all malignant Disorders, putrid and pestilential Fevers, more infallible Relief is to be expected from a few Citrons, than from all the various Preparations of the Oriental Bezoar.

Citrullus, Offic. *Citrullus folio Colocynthis secto, semine Nigro quibusdam Anguria*, J. B. *Anguria sive Citrullus vulgatio*, Park. Theat. Citrul, or Water Melon. It grows spontaneously in hot Climates, and though it is sown in more northern Countries, it never arrives at perfect Maturity. The fungous Pulp or Marrow is a grateful Ali-

ment, not very nourishing, aqueous, but justly celebrated for its moistening, laxative, diuretic, and refrigerating Qualities. The Seeds are by Physicians classed among the four greater cold Seeds. They provoke Urine, but less powerfully than the Seeds of the Pompion. They are principally used in cooling Emulsions.

Clematis, sive *Flammula surrecta*, *alba*, J. B. *Flammula Jovis*, Offic. *Flammula Jovis surrecta*, Park. Theat. Upright Ladies Bower. This flowers in Summer; the Herb with the Flower is used, and are of a hot burning Quality. The Flowers, Seeds, Bark and Root, have a caustic Virtue; rubb'd with the Fingers and then held to the Nostrils, it strikes them, in an Instant, with a strong and most vehement Smell. It yields a Water as hot as Spirit of Wine, and which is found to be very effectual, as *Matthiopolus* tells us, in the coldest Diseases, but doubtless it cannot be taken inwardly with Safety, unless it be well mixed and temper'd with other Waters, to prevent its injuring the Viscera. Some commend the Oil for the Sciatica, for Difficulty of Urine, and the Stone in the Kidneys, to be rubb'd on the Parts hot, or mixed with Clysters.

Clematis cœrulea vel purpurea repens, C. B. Pin. *Clematis Altera*, Offic. *Clematis peregrina flore rubro vel purpureo simplex*, Park. Theat. Virgins Bower. This is thought to be the *Clematis* of *Dioscorides*, who informs us, that the Seeds, taken in Water, or Hydromel, purge Phlegm and Bile, and that the Leaves applied to the Part affected, cure a Leprosy.

Clinopodium Origano simile, elatius, majore folio, C. B. Pin. *Clinopodium*, Offic. *Acinos sive Clinopodium majus*, Park. Theat. Great white

Basil. It grows frequently in Hedges. The Herb and its Decoction are taken as an Antidote against the Bites of venomous Animals, and as a Remedy for Spasms, Contusions, and Stranguries. It facilitates Delivery, provokes the Menstrues, and cures penile Warts, call'd *Acrochordones*, if taken for some Days. It stops a Diarrhœa, boil'd to the Consumption of one Third, and then drank. It must be boil'd in Wine, in Case of a Fever, but in Water if there is no Fever.

Cnicus sylvestris, hirsutior, sive Carduus Benedictus, C. B. Pin. *Carduus Benedictus*, Offic. *Carduus luteus, procumbens sudorificus & amarus*, Hist. Oxon. Holy Thistle. *Pauli* after *Cæsalpinus* observes, that the Head of this Herb, is of a fragrant Smell, resembling that of the Muscadell Pear; but *Cæsalpinus* compared it to that of Musk itself. This *Cnicus*, is said to have been first imported from the *Indies*, by Way of Present to the Emperor *Frederick* the Third, at which Juncture it was highly celebrated, either used in Aliments or Drink, as an excellent Preservative against that Species of Head-ach, call'd *Hemicrania*. It flowers in the Summer, and in the Autumn its Seeds become ripe. *Hoffman* gives us the following Account of the medicinal Virtues of this Plant: "Its Virtues are nearly
" the same with those of Worm-
" wood. Decoctions of it, especi-
" ally in Wine, are of singular Ef-
" ficacy, when the Patient is not
" feverish. It is less efficacious
" when exhibited in Powder, and
" the distilled Water is much less
" so. It is highly extolled in all
" pituitous Disorders of the Head,
" Hemicranias, Deafness, Verti-
" goes, Epilepsies, Defluxions on
" the Breast, Dropsies, Quartan Fe-
" goes

vers, and those of long standing, as these Disorders draw their Origin from Obstructions. It is, also, celebrated as an excellent Medicine in Colics, nephritic and sciatic Pains, as it partly dissolves the peccant Matter, and partly derives it to the urinary Passages. But its Efficacy, is principally celebrated in that formidable Disorder the Plague, against which it is used, both internally and externally. Internally it is exhibited, both with a preservative and curative Intention; since it powerfully excites a Diaphoresis. Externally it is applied, for breaking and opening pestilential Bubbles, with which Intention, it is also applied to other Impostumations. In the Opinion of the common People, a Wine prepared of it in the Autumn, is possessed of so powerful Qualities, that it is little less than a Panacea, or universal Remedy. It is preferable to the Wine of Wormwood, because, in Consequence of its analeptic Quality, it does not prove offensive to the Head, whilst, at the same Time, it is equally, if not more beneficial to the Stomach; for it is proper both for bilious and pituitous Patients. As it is a powerful Astringent, it is used in stopping Hæmorrhages."

There is another Species of Cnicus, which is the *Carduus pinea*, Offic. *Carduus Creticus humillimus integris & Augustis foliis*, Hist. Oxon. *Chamæleo albus Apulus purpureo flore gummifer*, Raii Hist. The Pine Thistle. The Country People of Apulia who attend the Flocks, gather the Gum produced in the Head, and between the Leaves of the Cup. This Gum they call *Cera di Cardo*, because when it is concremented, it becomes hard like Wax. They use it as a drawing

Topic. Whilst it is recent, its Parts cohere like those of Bird Lime, and may be drawn out into a Thread of a whitish Colour; for it originally consists of a milky Juice, which, when collected, becomes thick like Wax, and when handled assumes a blackish Colour. These Accounts are given by Colonna.

Cocculus Indus, Offic. *Cocci Orientales*, Ger. *Solanum racemosum Indicum arborescens*, *Cocculos Indos ferens*, Raii Dendr. Indian Berry. This is a little Berry, about as big as a Bay Berry, but more of a Kidney Shape, having a wrinkled Outside, with a Seam running Lengthways from the Back to the Navel. It is of a bitterish Taste, being the Fruit of a Tree described in the seventh Volume of the *Hortus Malabaricus*, under the Name of *Natsiatam*. *Crondronchius*, who has wrote a Treatise concerning these Berries, informs us, that he has often found from Experience, that a small Quantity of their Powder mixed with Hogs Lard, a boiled Apple, or some Substance of a like Nature, applied to the Heads of Children, kill Lice more effectually than Staves-acre, and with less Danger than Quick-silver.

Coccus de Maldiva, Offic. *Coccus de Maldiva, sive Nux Indica ad venena celebrata*, Raii Hist. *Palma Naldiensis, aliis Maldivensis*, Jons Dendr. The Maldiva Nut. This is of so high a Value among the Natives at Malabar, that as *Acosta* assures us, not only the common People, but even their Princes have Recourse to it as a sovereign Remedy, under almost all Kinds of Diseases, and it is accounted in particular, an excellent Alexipharmic. Under this Persuasion, they make drinking Cups of it, and let a Piece of the Pulp hang by a Chain in the Water which they drink, being

confident that no Poison can hurt those who drink out of those Cups. But some affirm, that they have found by Experience, that this Medicine is more injurious than beneficial. As to its specific Quality, says *Piso*, of promoting and facilitating Delivery, and of resisting the Fits of an Epilepsy, we have it confirm'd by more than one Experiment, and those made by some of our most eminent Physicians, who have used it with all the desired Success.

Cochlearia folio cubitali, Tourn. *Instit. Raphanus sylvestris*, Offic. *Raphanus sylvestris; seu Armoracia multitis*, J. B. Horie Rhadish. It grows wild in several Places, near River Sides, and is planted in Gardens for the Sake of the Root, which is only used. It is heating, drying aperitive, and frequently used in Sauces to create an Appetite. It is of great Use against the Scurvy, Dropsy and Jaundice, and is often put into Diet Drinks for those Purposes. The expressed Juice, being suffered to putrify, affords an alkaline volatile Salt, like that of Urine, which is the Reason why it is so highly beneficial in the Scurvy, arising from an acid State of the Fluids. In the other Kind of Scurvy it is very pernicious, in which Case, I have known it to procure a Rupture of the Liver. But where there is a Defect of Heat, and a Coldness and Viscidity of the Juices, it is very proper. In a Scurvy attended with a hot Fever and a Putrefaction, it would destroy the Patient. So, also, in a Dropsy, if it proceeds from a cold Cause, this Plant is proper to be used, otherwise not. This Root, taken in a large Quantity, excites Vomiting. The Juice drank to the Quantity of two Ounces, it is good for those who are afflicted with pituitous Sordes in the Stomach, and if

this be attended with Vomiting, it will be proper to drink plentifully of warm Water after taking the Dose. This Herb in Conjunction with Sorrel, makes an excellent antiscorbutic Medicine; but where its Acrimony is to be feared, it must be temper'd with Milk, Whey or Raisins. It is used for Gargarisms, in Putrefactions of the Gums, and yields a noble Spirit and Tincture. It is used externally in Sinapisms, and is an Ingredient in the *Aqua Rhabhani composita*.

Cochlearia folio subrotundo, C. B. Pin. *Cochlearia Batava, rotundifolia, hortensis*, Offic. *Cochlearia major rotundifolia, five Batavorum*, Park. Theat. Garden Scurvy Grass. It grows wild in several Parts of the North of England, by the Sea Side, but is very much cultivated in Gardens, and flowers in April. *Scurvy Grass* abounds with fine volatile Parts, and therefore the Herb infused, or the Juice expressed, is more prevalent than a Decoction, the volatile Parts flying away in the Boiling. This is accounted a specific Remedy against the Scurvy, purifying the Juices of the Body from the bad Effects of the Distemper, and cleansing the Skin from Scabbs, Pimples, and foul Eruptions. It must be remember'd, that these warm alcalescent Plants, are only proper in an acid Scurvy, but that in a putrid alkaline Scurvy, they are Poisons.

Cochlearia, folio sinuato, C. B. Pin. *Cochlearia Britannica marina*, Offic. *Cochlearia Britannica folio sinuato*, Hist. Oxon. Sea Scurvy Grass. It grows in salt Marshes, and particularly by the Thames Side, all the Way below Woolwich, and flowers rather later than the preceding Species. In scorbutic Remedies, the Sea Scurvy Grass is often used, mixed with the Garden Sort. It wants the fine volatile Parts, and is not so efficacious, but as it abounds much

much more in saline Particles, it may with good Success be used as a Diuretic.

Coffee, Offic. Jasminum Arabicum, Castaneæ folio, flore albo odoratissimo, cujus fructus Coffy in Officinis dicuntur, Boerh, Ind. A. The Coffee Tree. This is a low shrubby Tree or Bush, which grows in *Arabia Felix*. It is a Species of Jasmine, according to *Commelin*, having very sweet odoriferous Flowers, like those of Jasmine. Coffee is esteem'd efficacious for the Cure and Prevention of comatous Disorders, arising from Phlegm, or a too viscid Blood, and by its Chylification and Sanguification increases the Quantity of the animal Spirits, and repairs the Loss of them arising from preternatural Watching. By its volatile Salts it removes Obstructions of the Brain, dries up its superfluous Moisture, and consequently restores a due Degree of Elasticity to its Membranes and Vessels. Is an infallible Secret for removing that Species of Headach, which in Consequence of a bad Digestion, arises some Hours after Dinner. Coffee in general, seems more proper for Persons of phlegmatic Constitutions, than for Patients of choleric Habits. In most Disorders of the Head, such as a Cephalalgia, Vertigo, Lethargy, and Catarrh, when the Habit is plethoric, the Constitution cold, the Blood aqueous, the Brain too moist, and the Motion of the Spirits too slow and languid, Coffee is of great Advantage. On the contrary, those who are lean, of a bilious or melancholic Constitution, whose Blood is acrid or retorrid, whose Brain is hot, or whose animal Spirits are stimulated to too brisk and irregular Motions, ought entirely to abstain from this Liquor. *Hoffman* in his Dissertation, *de Remediorum benignorum Abusu* says, "no one will easily believe, that Coffee is prejudicial to

"his Health; since not only with the
"Turks, but with our Countrymen,
"nothing is more common than to
"drink liberally of it, both fasting
"and after Meals. Yet Proofs are not
"wanting to manifest the Consequen-
"ces arising from a too frequent and
"immoderate Use of this Liquor,
"especially to weakly Persons, but
"more particularly Women, whose
"Nerves and Strength is considerably
"impair'd by it, and either in Child
"Birth, or on the Attack of an Dis-
"ease, so considerable a Languor is
"brought on, that their Strength is
"hardly able to surmount the Symp-
"toms with which they are afflicted."

Stenzelius in his *Toxicologia* says, Coffee often proves a temporary Poison, when used too frequently, in too large Quantities, or promiscuously by Persons of every Constitution, especially in the Afternoon; for by the roasting, its saline volatile Parts are carried off, and there are only left a narcotic Oil and an Earth, which produce Obstructions and Costiveness. In the Year 1695, it was in the Schools of *Paris* defended as a Thesis, that the daily Use of Coffee rendered both Men and Women unfit for Procreation, but no one will affirm this, who considers, that as numerous a Progeny is brought into the World, since the daily Use of this Liquor in *Europe*, as before. Coffee made very strong, is esteem'd by some an excellent Remedy for a nervous Asthma, and is said to attenuate the Blood, and to be diuretic. *Geoffroy* affirms, that its Use endangers a Miscarriage.

Colchicum commune, C. B. Pin. *Colchicum*, Offic. J. B. *Colchicum purpureum* & *Anglicum album*, Ger. Meadow Saffron. It is found in fat and rich Meadows. The Root is the Part used, and is mortal to those who eat it after the Manner of Mushrooms, by suffocating them.

them. The Root is by some supposed to be the Hermodactyl of the Shops. It is of a poisonous Quality, but recommended, externally applied, in the Gout.

Colchicum Chionense, floribus Fritillariæ instar tessellatis, foliis undulatis, Hist. Oxon. *Hermodactylus*, Offic. *Colchicum minus malignum, sive Hermodactylus Officinarum*, J. B. *Hermodactyls*. Authors greatly differ with Respect to the Plant of which this is the Root. Some affirm it to be the Root of a *Colchicum*, or *Dens Caninus*, others that of the tuberous *Iris*, and others, of a Species of *Cyclamen*. It is a very strong Cathartic, and purges ferrous and phlegmatic Humours from the Joints, and is therefore highly recommended in the Gout, and rheumatic Pains in the Limbs.

Colocynthis, Offic. *Colocynthis vulgaris*, Park. Theat. *Colocynthis fructu Rotundo minor*, C. B. Pin. *Coloquintida*. The Pulp of this Fruit is bitter and purgative, but the Seeds have neither of these Qualities, in so great a Degree, except they have touch'd the Pulp; for then they become very bitter. *Coloquintida* taken in a large Dose, is one of the most violent Purges now known. It not only brings away pure Blood, but produces violent Convulsions, Ulcers in the Intestines, and fatal Hypercatharses. When the Pulp is taken in Substance, it sticks to the Coats of the Stomach and Intestines, and therefore it has been judged convenient to divide it as much as possible. Thus being reduced to a fine Powder, it is made up into Lozenges, called *Trochisci Albandal*, but even these, are hurtful to Persons of weak abdominal Viscera. When it is thought proper to give it in Clysters, it ought to be boil'd in a Linnen Bag, that no large Pieces of the Pulp may mix with the Decoction. These Clysters are often ordered in apo-

plectic Cases. Some say, that *Coloquintida* will purge Children, by being reduced to a Paste with *Oxes Gall*, and applied to the Navel.

Colocynthis fructu Rotundo major, C. B. Pin. *Colocynthis major Rotunda*, Park. Theat. The greater *Coloquintida*. This Plant is imported from the *Levant*, and is said to agree with the preceeding in Virturs.

Colutea vesicaria, C. B. Pin. *Colutea*, Offic. *Pseudo-Senna, sive Senna Europæa*, Boerh. Ind. Alt. *Bastard Senna*. It grows wild in several Parts of *Italy*, but with us only in Gardens, and flowers in *July*. The Leaves of this Plant, but more especially the Seeds, purge most violently, both upwards and downwards, and consequently ought only to be exhibited to Persons of very strong and robust Constitutions, nor even then without good Correctives.

Contrayerva, Offic. *Contrayerva Hispanorum sive Drakena Radix*, Park. Theat. Counterpoison. The *Contrayerva* Root, was called *Drakena* by *Clusius*, because it was first imported into *England* in 1581, by Sir *Francis Drake*, on his having finish'd his Voyage round the World. From its Smell and Taste, it seems to be compos'd of a moderate Portion of a volatile, oleous, and aromatic Principle, wrapt up in earthy Parts. Hence we may account for its aromatic Qualities, that is, those by which it stimulates, incides, attenuates, corroborates, resists Poison, and increases the Motion of the Humours. Hence it becomes proper, in Cases, where Perspiration is to be augmented, or the Body heated, and in Fevers, in which Coldness is to be surmounted, and the Causes of the Disorder eliminated thro' the cutaneous Pores. *Clusius* informs us, that the Inhabitants of *Peru*, esteem it highly as an Alexipharmic; that it strengthens the Heart and vital Faculties, if the

Powder of it is taken in a little Wine in the Morning; and that in Water it contributes to allay feverish Heats.

Monardus says, that the Powder of *Contrayerva* exhibited in white Wine, is a speedy and efficacious Remedy against Poisons of all Kinds, Sublimate only excepted, (which can only be cured by copious Draughts of Milk) since it either throws it up, or evacuates it by a Diaphoresis. The Powder of *Contrayerva*, is said to dislodge Worms from the Intestines. Tho' it is esteem'd a very good Counterpoison, yet, because it seems to act by stimulating, resolving, and putting the Humours into Commotion, we cannot hence reasonably conclude, that it is an universal Antidote. This to *Wedelius* seems too hyperbolical an Assertion, since different Poisons require Remedies of different Virtues. It is certainly very efficacious against most malignant Disorders, and in Cases where the Intention is to excite a Diaphoresis. *Paulus Neucrantzius* affirms, that he has found it highly efficacious in purple Fevers, in which it carries off the peccant Matter by a Diaphoresis, but rarely operates by Vomit. Some, in intermittent Fevers, exhibit the Powder of *Contrayerva*, with double the Quantity of *Peruvian Bark*, and against Dysenteries, in Conjunction with *Ipecacuanha*. *Contrayerva* is an Ingredient in the *Syrupus Contrayervæ*, and the *Pulvis Contrayervæ compositus*. The *Contrayerva Nova*, commonly called *Mexicana*, was imported into Europe after the preceding Species, and is thought to be a Native of Mexico; it is of a sweet aromatic Taste, and differing but very little from the ancient *Contrayerva*, to which it is not thought inferior. On Account of its alexipharmic, diaphoretic, and antifebrile Qualities, it is prescribed in Conjunction with Absorbents, for the

Cure of malignant and petechical Fevers, Measles, and the Small Pox.

Conyza Mas Theophrasti, major Dioscoridis, C. B. *Conyza major*, Offic. *Conyza pulicaria*, Chab. Greater Flea Bane. It grows in Italy, and other Places, near the Highways, where it flowers in July and August. The Fume of the Leaves when burned, is said to drive away Gnats, Fleas, and other troublesome Insects.

Conyza Media, Offic. *Conyza media Asteris flore luteo, vel tertia Dioscoridis*, C. B. *Conyza media Matthioli, flore magno luteo, humidis locis proveniens*, J. B. Common Flea Bane. It grows in moist and watry Places, and flowers in July and August. Some prepare an Ointment of the Leaves and Root of this Plant, which is recommended for the Itch. The Leaves taken with red Wine, are said to be good against a Dysentery and Jaundice, to be effectual in promoting the Menfes, and curing a Strangury. The Decoction of the Herb, has the Reputation of being diuretic.

Conyza minor Vera, Offic. *Conyza fœmina Theophrasti, minor Dioscoridis*, C. B. *Virga aurea minor foliis glutinosi & graveolentibus*, Tourn. Inst. Small true Flea Bane. It agrees in Virtues with the first Species.

Corallina, Offic. *Muscus Maritimus, sive Corallina Officinarum*, C. B. Sea Coralline. White Wormseed. It grows upon Rocks of the Sea, and often on Oysters and other Shell Fish; and is only used to destroy and expel Worms from the Bowels, when reduced to Powder.

Corallium Album, Offic. *Corallium album majus*, Park. White Coral. It is found upon the Rocks, in the Tuscan and Sicilian Seas. It is good in all Fluxes, Cardialgias, and Disorders proceeding from an Acid.

Corallium

Corallium rubrum, Offic. *Corallium Rubrum majus*, Park. Red Coral. It grows in the Sea, and is found with the White, than which it is more used. It is drying, refrigerating, and astringent, sweetens the Blood, frees the Stomach from acid Juices, greatly strengthens the Liver, and stops all Fluxes. This is an Ingredient in the *Pulvis e Chelis Cancratorum compositus*.

Corallium nigrum, Raii Hist. *Corallium Nigrum sive Antipathes*, J. B. *Keratophyton arboreum Nigrum*, Boerh. Ind. A. Black Coral. It is found sometimes in the *Italian*, but more frequently in the *American* Sea. It agrees with the other Corals in Virtues.

Another Species is, the *Asteroites*, *Stellaris*, & *Stellæ Lapis*, Mont. Exot. *Lapidis Asteroitidis sive Stellaris primus genus*, Boet. *Stellaris Lapis*, Laet. de Gem. Star Stone. It is found in the Sea near *Jamaica*, and has the same Virtues as the preceeding Corals.

Coriandrum, Offic. *Coriandrum majus*, Boerh. Ind. A. Coriander. It is sown in Fields, and flowers in *June*. The whole Plant, whilst green, has a nauseous ungrateful Smell; but the Seed when dry, is of a pleasant agreeable Scent, and is ripe in *July* and *August*; the Seed is the only Part in Use, and is esteemed stomachic, suppresses those Vapours which offend the Head, and produce Eructations, and is a good Corrector of drastic Medicines. Yet *Dioscorides* writes, that being drank, it causes Hoarseness, with a Disturbance of the Brain and Reason, like that excited by excessive drinking of Wine *Simeon Sethi* says, that the Juice drank, is a mortal Poison, and makes the whole Body smell of *Coriander*. Several of the *Arabians* have ascribed to this Plant a cold narcotic Quality, producing a Stupor, Disturbance of the Senses and fatal Dis-

orders. To this *Matthiolus* adds, that the Seed ought never to be used in Food or Medicine, without a previous Maceration for three Days in Vinegar. Yet *Lobel* and *Alpinus* assure us, that the *Egyptians* very commonly use the green Herb in Food. *Baubine*, is of Opinion, that we ought to be very cautious in the Use of this Plant, especially if unprepared. It is an Ingredient in the *Aqua Calcis magis composita*, and the *Electuarium Lenitivum*.

Coris, Offic. *Hypericordes Coris quorundam* & *Coris legitima cretica*, J. B. Bastard St. John's Wort. It flowers in *June*, and the Seed is the only Part in Use, which provokes Urine and the Menfes, is good against the Bite of the *Phalangium* (a poisonous Spider) and for that Species of Convulsion, called *Opisthotonos*; for which the Oil must be impregnated with the Plant, and applied externally.

Cornus, Offic. *Cornus Mas*, Ger. *Cornus sativa sive domestica*, J. B. The Cornelian Cherry. It grows in Gardens, and flowers in *March* and *April*. The Fruit is the Part used, which is cooling, drying, and astringent, strengthens the Stomach, stops Fluxes and Looseness, and is good in Fevers, especially when attended with a *Diarrhæa*.

Corona solis Tabernæmontani, E. lem. Bot. *Flos Solis*, Offic. Sun Flower. It is thought, to be of the Number of the vulnerary Plants, in Consequence of the terebinthinaeous balsamic Liquor, with which it abounds. *Etmüller* says, that the seed Vessels, when the Seeds are almost ripe, if cut and boiled, afford a copious Gum, which reduced into the Form of a Plaster, is a most singular Vulnerary. Some say they are Incentives to Venery.

Coronopus hortensis, C. B. Pin. *Coronopus*, Offic. *Coronopus sive Cornu Cervinum vulgo Spica Plantaginea*, *June*,

J. B. Buckthorn Plantain. It grows in sandy Places, and flowers in June. It agrees in Virtues with the other Plantains, and is said to be very efficacious in the Cure of a *Hypochondria*.

Cortex Massoy, Mont. Exot. This is a warm aromatic Bark, found in *New England*, but not in our Shops. It is alexipharmic, opening, carminative, cephalic, cordial and stomachic. It is said to warm very much, to ease pungent Pains and Gripes, and to be possess'd of a very grateful Fragrance.

Cortex Winteranus, Offic. Cortex Winteranus, Cortex Megallanicus, Mont. Exot. Cortex Winteranus acriis, five Canella alba, J. B. Winter's Cinnamon. It grows in the *Streights of Magellan*, very plentifully. The Bark is resolvent, discutient, and subastringent; for which Reason, it is successfully prescribed in Disorders of the Stomach, Crudities, Nauseas, Diarrhæas, excessive Vomitings, and Colics; as, also, in the Declension and End of intermittent Fevers, with a View to corroborate the Stomach. It is, also, said to be highly beneficial to scorbutic Patients, and such as labour under Obstructions of the Viscera, Cachexies, and Irregularities of the Menfes; but it neither cures quartan nor petechial Fevers, nor affords any considerable Relief to paralytic Patients. The wild Cinnamon, is not the true *Cortex Winteranus*, for which, it is commonly sold in the Shops. But tho' they are the Barks of different Trees, growing in very distant Places, and by their outward Appearance, seem quite different from each other, yet their Taste is much the same, and they may be used as a *Succedaneum* to each other, tho' the true is much to be valued beyond the false (which is now generally sold in the Shops) being far

more aromatic. It is an Ingredient in the *Tinctura Sacra*, and *Hiera Picra*, of the *London Pharmacopœia*.

Cortusa, J. B. Cortusa sanicula montana, Offic. Sanicula alpina five Cortusa Matthioli, Park. Theat. Bears Ear Sanicle. It grows in mountainous Places, and flowers in the Spring. The Leaves promote Expectoration.

Costus, Offic. Costus Arabicus Dioscoridis, C. B. Pin. Iridem redolens ejusdem amarus, Officinarum, five Helenium, & Comagenium Dioscoridis ejusdem, dulcis Officinarum, Centauro magna Cognatus ejusdem, Raii Hist. Sweet and bitter Costus. It is reckoned hot, dry, and comforting to the Head and Stomach. It helps vertiginous Disorders, is a good Deobstruent, opens Obstructions of the Uterus, and procures the Catamenia. It is also esteemed a good Hepatic, and of Service in Obstructions of the urinary Ducts and against the Colic, Dropsy, and Palsy. It is an Ingredient in the *Confectio Paulina*, *Mithridatium*, & *Theriaca Andromachi*. According to some there are three Species of Costus in the Shops, viz. The *Arabian*, the *Bitter*, and the *Sweet*; hence *Caspar Bauhine* and other Botanic Authors, have divided it into four Species. But *Bontius* rightly informs us, that it is one and the same Root differing only either by Place, Age, or Corruption. *Garcias ab Horto*, together with *Acosta* and *Clusius*, believe there is but one Species, who say that when it is fresh, it is Sweet and of a whitish Colour, but that when it begins to corrupt by Age, it contracts a Bitterness, and grows black.

Cotinus Coriaria, Boerh. Ind. A. Cotinus, Offic. Coccigria, five Cotinus putata, J. B. Venice or red Sumach. It is found in *Italy*, flowers in *May*, and the Fruit is ripe in *August*. The Fruit is thought to be extremely

treemly drying and astringent; Gargarisms are prepared of a Decoction of the Leaves, which are good for Ulcers of the Mouth and Tongue, and are used against Relaxations of the Uvula and Glands in the Fauces. The Fruit is particularly serviceable, in Ulcers of the Fauces and Pudenda, and restrains Diarrhæas, and a too copious Discharge of the Menfes. According to *Matthiolus* the Leaves dried and powdered, and then sprinkled on the Belly, after anointing it with Vinegar of Roses, stop any Flux of the Belly.

Cotyledon major, C. B. Boerh. Ind. A. *Umbilicus Veneris*, Offic. Navelwort. It grows upon old Stone Walls and Buildings in England, and flowers in May. The Leaves are the only Part used, which are gently cooling, moistening, refrigerating, and astringent. They are useful in hot Distempers of the Liver, provoke Urine, and take off the Heat and Sharpness thereof; the Juice outwardly applied helps the Shingles, and St. Anthony's Fire, the Pain and Inflammations of the Piles, and is likewise useful in Kibes and Chilblains.

Cotyledon, Offic. *Cotyledon radice tuberosa longa repente*, Elem. Bot. *Sedum luteum umbilicatum, spicatum radice repente*, Hist. Oxon. Creeping Navelwort. The Leaves are used with the same Intentions as the former.

Couhage, Offic. *Phascolus filiqua hirsuta*, Park. Theat. *Pascolus Zurratensis filiqua hirsuta pungente*, Hist. Oxon. Couhage or stinking Beans. They grow in the East-Indies, from whence they are brought to us. The Bean is the Part used by the Inhabitants of Barbadoes for a Dropsy.

Cratægus, folio laciniato, Boerh. Ind. A. *Sorbus torminalis*, Offic. *Sorbus torminalis seu Vulgaris*, Park. Theat. The Wild Service or Sorb Tree. The Fruit of this Tree is substituted for the *Sorbus Sativa*, or

true *Sorbus*, being of the same Nature or rather more astringent and binding. It is good for all Kinds of Fluxes, either of Blood or Humours when ripe it is pleasant and grateful to the Stomach, promotes Digestion, prevents the too hasty Passage of the Food to the Bowels, and is commended in Fevers attended with a Diarrhæa.

Crithmum, sive fœniculum maritimum majus, Boerh. Ind. A. *Crithmum fœniculum marinum herba Sancti Petri*, Offic. Samphire. The whole Plant has a warm aromatic Smell and Taste, growing upon the Rocks by the Sea side in many Places in England. It strengthens the Stomach, procures an Appetite, provokes Urine, opens Obstructions, is good for the Jaundice, and is extoll'd as a Dissolver of the Stone and Promoter of the Menfes.

Crocus Sativus, C. B. Pin. Boerh. Ind. Alt. *Crocus*, Offic. Ger. Saffron. This is a Simple so well known that no Description of it seems necessary. *Hoffman in Dissert. de Remed. Domest. Util.* informs us, that Saffron in Consequence of its mild, anodyne, and vaporous Sulphur, is excellently calculated for alleviating Pains and Spasms, and that by Means of its acrid and volatile Salt, it contributes to open and remove Obstructions. *Newman* deduces the narcotic Virtue of Saffron, from its highly attenuated, rarified, and vaporous oleous Parts. *Lord Bacon* advises Saffron to be mixed with Medicines, intended to prevent the Effects of old Age; for continues he, Saffron conveys Medicines to the Heart, cures its Palpitation, prevents Melancholy and Uneasiness, revives the Brain, renders the Mind cheerful, and generates Boldness. *Boerhaave*, in his Chymistry, calls Saffron a true and genuine Rouser of the animal Spirits, because it is possessed of aromatic, stimulating, and heat-

heating Qualities, and is therefore discutient, resolvent, aperient, and corroborating. *Diemerbroeck* in his *Treatise de Peste* informs us, that Saffron is not to be exhibited in Plagues, because it affects the Head, and when exhibited in large Quantities, induces a Drowsiness or Delirium, both which Symptoms, are highly to be dreaded in pestilential Disorders. It is by some, successfully exhibited in order to purge the Lungs from viscid Phlegm. *Camerarius*, in his *Hortus Medicus*, affirms, that it is so beneficial in Disorders of the Thorax, that some exhibit a Scruple and an Half of it, with Half a Grain of Musk, to be drank in warm Wine, for curing Asthmas. He also affirms, that it greatly contributes to remove the Effects of a Perspiration obstructed by Cold. *Paulus de Sorbait* informs us, that if we want to protract the Life of a phthisical Patient, for some time, we must exhibit to him, Half a Scruple of Saffron. In the Cure of a Dysentery, Saffron acquired a great Reputation after *Bontius* affirmed, that no more efficacious Remedy could be found, and that the Extract of Saffron was the most genuine Antidote in this Disorder, tho' of the most obstinate and virulent Kind. *Baubine*, from *Mattbiolus*, informs us, that Children who continually cry, are weak, and discharge scabulous Concretions in their Urine, are greatly reliev'd by a little Saffron, exhibited with Milk. The Cases related by practical Authors, of Children tinged in their Mothers Bellies, sufficiently prove that Saffron has a peculiar Influence on the Uterus, and that its emmenagogue and ecbohic Virtues are to be deriv'd from this Circumstance. Lord *Bacon* informs us, that a certain Gentleman, who used to be excessively sick at Sea, had his Nauseas prevented by wearing a Bag of Saffron on the Region of his

Stomach. Externally, it is commended as an excellent Ingredient in Medicines calculated for Disorders of the Eyes. According to *Baubine*, Saffron mixed with Milk, Oil of Roses and a little Smallage, alleviates the intense Pains of a Gout, arising from a hot Cause. In arthritic Pains and Erysipelas, a linen Cloth impregnated with Saffron, is said to be a divine Remedy. *Etmuller* informs us, that Spirit of Wine impregnated with Saffron, and applied with a linen Cloth to the Toes and Fingers, when so injur'd by the Cold, that a Gangrene is apprehended, is an excellent Remedy. *Wedelius* in his *Opologia*, informs us, that Nurses, in Order to remove obstinate Watchings in Children, put a Bag of Saffron under their Heads. But *Fricius* says, that this Bag should be taken away as soon as the Child is asleep. Saffron is often used in Conjunction with Opium; but *Geoffrey* justly doubts, whether it either corrects, or augments the Effects of the Opium. *Borelli*, in his *Observationes Medico-Chymicae*, informs us, that a certain Woman, by wearing Saffron on the Pit of her Stomach, was cur'd of Melancholy, and a perpetual Inclination to weep. *Schulzius* in his *Prælectiones*, informs us, that the exhilarating Virtues of Saffron, are sufficiently conspicuous in young Children, who are set a laughing, by applying to their Nostrils, an empty Phial, in which Essence of Saffron has been. But the celebrated *Junker*, is of Opinion, that its internal Use, especially in a large Quantity, is far from being safe, tho' he thinks that its external Use is established upon surer Foundations; for, says he, it is highly proper for an Erysipelas, and inflammatory Tumors; especially for dispelling the serous Matter lodg'd in them, and alleviating the Pains with which they

they are accompanied. *Hoffman*, in *Dissert. de Remed. Domest. Præstant.* speaks thus of it: "In obstinate Coughs and Difficulties of Breathing, an Infusion of Saffron in the Water of Paul's Betony, with the Addition of a sufficient Quantity of Sugar Candy, is found to be of singular Efficacy. An Infusion of it with Cinnamon Water, is highly beneficial for provoking the Menfes; facilitating difficult Labours; facilitating the Secundines, and promoting the Lochia; especially, when at the same Time, Oil of sweet Almonds is now-and-then exhibited. Externally, Saffron, boil'd with Milk, the Flowers of Elder and Chamomile, and the Crumbs of Bread, and applied by Way of Cataplasim, wonderfully alleviates arthritic Pains." I have also known the same Remedy applied with Success, for removing the Pain of the blind Hæmorrhoids. Saffron put into Rosewater, with the Addition of a little Camphire, cures Inflammations of the Eyes, in the Measles and Small-Pox. But, tho' numerous Virtues are ascrib'd to Saffron; yet *Galen* in *Tr. de Simpl. Med. Facult.* classes Saffron among these Substances, which when liberally used, either destroy the Patient's Reason, or procure his Death. Besides, *Geoffroy*, *Borelli*, *Friccius*, *Amatus Lusitanus*, *Caspar Hoffman*, *Simon Pauli*, and other practical Authors, furnish us with Instances, in which Saffron has produced Death, Deliriums, so immoderate Discharges of the Menfes, as to prove mortal, and other very terrible Symptoms; so that as the moderate Use of Saffron is highly beneficial in several Diseases, it is equally obvious, that when exhibited uselessly, in too large Doses, or for too long a Time, it proves highly prejudicial to Health. For this

Reason, *Boerhaave* plac'd it among the narcotic Poisons, and its Antidotes are aqueous, oleous, acidulated Vomits, and such as have Honey for an Ingredient. It is also obvious, that Saffron is better adapted to those of cold and leucophlegmatic, than those of hot and bilious Constitutions. With Respect to the Dose of Saffron, Authors are by no Means agreed; since as *Geoffroy* observes, some affirm, that Half a Scruple, and others a Scruple and an Half, may be safely exhibited internally. According to *Etmuller*, the Inhabitants of Poland, are so accusom'd to the Use of Saffron, that they often mix an Ounce of it with their Aliments. But this is purely owing to the Force of Custom, the Power of which is sufficiently obvious, from those who gradually habituating themselves to Opium, can at last bear a Quantity, which would have at first prov'd infallibly mortal. But upon the Whole, it seems that Saffron may be safely prescribed in Substance, from Half a Scruple to a whole Scruple, or even Half a Dram; tho' the largest Dose, for such as are not accusom'd to it, ought not to exceed Half a Scruple. It is an Ingredient in the *Vinum Aloeticum Alkalinum*; *Vinum Crocum*; *Tinctura Rhabarbari*; *Tinctura Rhabarbari Spirituosa*; *Ellixir Aloes*; *Syrupus Croceus*; *Pilule Rufi*; *Pilule e Styrae*; *Confectio Cardiaca*; *Mithridatium*; and the *Tberiaca Andromachi*.

Cruciata, Offic. *Cruciata vulgaris*, Park. Theat. *Gallium, Cruciata quibusdam flore luteo*, J. B. Crosswort. It grows in Hedges and Borders of Fields, and flowers in July. The Leaves and Tops are used; this Plant is classed among the vulnerary Herbs, in Consequence of its drying and astringent Qualities, but chiefly is extoll'd in

Swellings

Swellings of the Scrotum, occasioned by the falling down of the Intestines. *Camerarius* highly recommends a Decoction of this Herb, for promoting the Expectoration of viscid Humours.

Cubebæ, Offic. *Arbor baccifera Brasiliensis, fructu piper recipiente*, Raii Hist. *Arbor Bisnagarica Myrti amplioribus foliis, per Siccitatem nigris*, *Cubebæ sapore*, Pluk. Almag. *Cubebæ*. They are brought to us from the Island of *Java*, and are recommended in a Hoarseness and Loss of Voice, especially when the Tonsils are stuffed and obstructed. They are both heating and drying, corroborate the Stomach, expel Wind, and, are particularly useful in all Disorders of the Head.

Cucumis sativus vulgaris, C. B. Pin. *Cucumis hortensis*, Offic. *Cucumis sativus*, Park. Theat. *Cucumber*. This is common in Gardens, and flowers in *June*; the Fruit and Seed, which is one of the four greater cold Seeds are used; The seeds are esteem'd refrigerating, abstergent, and opening; they provoke Urine, and are frequently used in antipleuritic and antinephritic Emulsions.

Cucurbita, Offic. *Cucurbita lagenaria major*, Park. Theat. The Gourd. It grows in Gardens, tho' seldom, and flowers in *July*. The Seed, which is the only Part used, is one of the four greater cold Seeds, and allays Thirst, provokes Urine, and extinguishes Inclinations to Venery.

Cuminum sylvestre, Offic. *Cuminum sylvestre primum valde odoratum, globosum*, J. B. *Umbelliferis affinis, capitulis globosis & villosis*, Hist. Oxon. Wild Cumin. This Plant grows principally in *Crete*. The Part used in Medicine, is the Seed, which is recommended against Flatulencies, for curing the Hiccup, removing Sugillations, and repelling Inflammations of the Testes.

Cuminum, Offic. *Cuminum sive Cuminum sativum*, J. B. *Fœniculum Orientale Cuminum dictum*, Tourn. Inst. Cumin. This Plant grows in great Quantities, in the Islands of *Malta* and *Sicily*, from whence it is brought to us. The Seed is the only Part in Use, and is one of the four greater hot Seeds; it is of a very warming Quality, and powerfully expels Wind from the Stomach and Bowels; for which Purpose, it is often exhibited in Clysters, as, also, sometimes in Powder mixed with Wine. Externally applied, it is very efficacious in removing Pains of the Breast, Sides, or Bowels. This is an Ingredient in the *Oleum Cymini*; *Mel Solutivum*; *Emplastrum e Cymino*; and *Cataplasma e Cymino*, of the last London Pharmacopœia.

Cuminum Siliculosum, Offic. *Hypecoi altera Species*, C. B. Pin. *Hypecoum siliquis propendentibus, non articulatis, bivalvibus incurvis*, Hist. Oxon. Codden wild Cumin. This Plant grows in *Spain*, flowers in *May*, and is said to have the same Effect as the Poppy.

Curcuma, Offic. *Crocus Indicus, Arabibus Curcum, Officinis nostris, radix Curcuma dicta*, Bon. *Cannacorus radice crocea sive Curcuma Officinarum*, Boerh. Ind. A. Turmeric. It grows in the *East Indies*, from whence it is brought to us. Of this Plant there are two Species, the *Long* and *Round*; but the first is best; its Virtues are said to be abstergent, attenuating, opening and discutient; it provokes the Menfes, facilitates Delivery, opens all Obstructions of the Intestines, provokes Urine, expels the Stone, and is a Specific in all icteric, dropsical, and cachetic Disorders.

Cuscuta, Offic. Park. Theat. *Cuscuta major*, C. B. Pin. Raii Synop. Tourn. Inst. *Cuscuta sive Cuscuta*, J. B. Dodder. This Herb grows in Thickets, and is said to be
Y excellent

excellent against Disorders of the Liver and Spleen. It is also abstergent, subastringent, and aperient. It corrects melancholic Humours, and is beneficial in the Itch and black Jaundice.

Cuscuta minor, is thus distinguished. *Epithymum*, Offic. Park. Theat. *Epithymum sive Cuscuta minor*, C. B. Pin. Raii Hist. *Cuscuta minor*, Tourn. Inst. Dodder of Thyme. The whole Plant is used. It gently purges melancholic and serous Humours. It is principally used in the Itch, Ulcers, melancholic Disorders, and Obstructions of the Hypochondria and Spleen. *Tournefort* informs us, that the Species brought from the *Levant* under the Name of *Venetian Dodder*, does not purge, but is rather aperient and stomachic.

Cyanus major, Offic. Ger. Raii Hist. *Cyanus major vulgaris*, Park. *Cyanus hortensis*, Boerh. Ind. Alt. Great Blew-bottle. This is cultivated in Gardens, and flowers in *June* and *July*. The Leaves and Flowers are used, and are said to be of an alexipharmic and uterine Nature. They are cold, temperate, and consequently of a repelling Quality. They are also said to be beneficial in an Erysipelas, the Jaundice, Palpitations of the Heart, and Suffocations of the Uterus.

Cyanus minor, Offic. *Cyanus Segetum*, C. B. Boerh. Ind. Alt. Small Blew-bottle. This grows among the Corn, and flowers in *June*. The Leaves and Flowers are used. The distilled Water of the Flowers is said to be beneficial in Dropsies, and in Inflammations, Redness and Lippitude of the Eyes. In *Saxony* it is customary to give a Glass of Beer, in which an Handful of it has been boiled, to those who labour under the Jaundice, or a Retention of Urine. *Camerarius* used to bathe the Gums of Infants, with the distilled Water of the *Cyanus*, mixed with the Juice of

Cray-fish, in order to make the Teeth cut easily: The Powder of this Plant, according to the same Author, resolves a *St. Antony's Fire* in the Face. A Decoction of the Flowers is diuretic and emmenagogue.

Cyclamen is thus distinguished. *Arthanita Cyclamen*, Offic. *Cyclamen*, Schrod. *Cyclamen orbiculato folio inferne purpurascens*, C. B. Pin. Boerh. Ind. Alt. Sow-bread. This is cultivated in the Gardens of the Curious, and flowers in *September*. The only Part of it used is its Root, which is highly inciding, aperient and proper for Errhines. It is principally used in Obstructions of the Menstrues, and for expelling the Foetus, but internally it ought to be used with great Caution.

Cyclamen artanita, Offic. *Cyclamen hederæ folio*, Raii Hist. Boerh. Ind. Alt. Common Sow-bread. This is frequent in Gardens, and flowers in *September*. Its Root is used and is possessed of the same Virtues with the former. This is the Species found in the Shops.

Cydonia thus distinguished. *Malus Cydonia*, *Cotonia*, Offic. *Malus Cydonia*, Boerh. Ind. Alt. The Quince Tree. This is cultivated in Gardens and green Houses, and flowers in *April*. The Fruit and Seeds are used, the former being stomachic, refrigerating, drying, and astringent. They are principally used in Vomiting, Fluxes, Hiccups, and Relaxations of the Stomach. The Seeds are cooling, and moistening, and by their Mucilage correct and obtund Acrimony.

Cynoglossa, Offic. *Cynoglossum*, Raii Synop. *Cynoglossum majus vulgare*, C. B. Pin. Tourn. Inst. Houndstongue. This grows on the Road sides and flowers in *June*. The Root and Leaves are used, and are of a refrigerating and drying Nature. They are recommended for stopping

stopping Fluxes, Gonorrhæas, Catarrhs, and Hemorrhages. They cure scrophulous and stumous Disorders, and are serviceable to Wounds and Ulcers of all Kinds. Some, also, ascribe a narcotic Quality to this Plant. But Dr. Fuller says, he could never discover any such Virtue in it. This Plant, when subjected to a chymical Analysis, gives strong Indications of an acrid Salt and Sulphur. Thus the Root of it is proper to stop all Sorts of Defluents, and to correct acrid Humours. The Leaves of the Plant are vulnerary and detergent.

Cyperus longus, Offic. Ger. *Cyperus odoratus radice longa sive Cyperus Officinarum*, C. B. Pin. Boerh. Ind. Alt. Long-rooted Cyperus. It grows in marshy Places, but is very rarely to be met with. The Root is used, and is said to be stomachic and uterine. It is principally recommended for exciting a Discharge of Urine, and the Menfes, for consuming the Crudities in the Stomach, curing a begun Dropsy, removing the Colic, and Vertigo, and for rendering the Breath Sweet.

Cyperus rotundus, Offic. *Cyperus rotundus orientalis major*, C. B. Pin. Round rooted Cyperus. This is brought to us from Egypt, and its Root is used for the same Purposes with the former.

Cyperus esculentus, Raii Hist. *Cyperus rotundus, esculentus angustifolius*, C. B. Pin. Boerh. Ind. Alt. *Cyperus nitoticus vel Syriacus maximus papyraceus*, Hist. Oxon. Sweet Cyperus or Rush-nut. This grows in Egypt, and Syria. The Stalks are recommended as useful for relaxing Fistulas, and the Water distilled from such as are recent, is good against Catarrhs, Dimness of Sight, and other Disorders of the Eyes.

Cypressus mas & fœmina Plinii, Tourn. Inst. Boerh. Ind. Alt. The Cypress Tree. This is cultivated

in Gardens. The Wood, Tops, and Nuts are used. The Wood is refrigerating, drying, and astringent. The Tops and Nuts are moderately heating, drying, and highly astringent, for which Reason they are principally recommended in Spitting of Blood, Diarrhæas, Dysenteries, and involuntary Discharges of Urine. They are, also, used, both internally and externally in curing Hernias.

Cytiso-genista Scoparia vulgaris, flore luteo, Boerh. Ind. Alt. *Genista*, Offic. Ger. *Genista vulgaris et Scoparia*, Park. Theat. Common Broom. This grows in Fields and Commons, and flowers in April and May. The Flowers and Stalks are used, and are said to be aperient, hepatic, and proper for removing Obstructions of the Spleen. They provoke Urine, and infused in common Drink are good for the Dropsy; the Flowers pickled with Salt and Vinegar, are esteem'd wholesome for the Stomach and good against Diseases of the Spleen and Liver. This Plant is accounted excellent in a Dropsy.

Cytisus, Offic. *Cytisus incanus, siliquis falcatis*, C. B. Pin. *Medicago trifolia frutescens incana*, Boerh. Ind. Alt. Shrub Trefoil. It grows in Gardens, and flowers in Summer; the Leaves are only used, and are said to refrigerate, and discuss Tumors, and a Decoction of them is recommended for provoking Urine. Though ancient Authors, mention but one Species of the *Cytisus*, and that but very imperfectly, yet more modern Botanists have found several Plants to which they give that Name, tho' this Plant may more justly than any other assume the Name of the *Cytisus* of *Dioscorides*. *Volckamerus* says, that it is at this Time in daily Use among the Turks, so that if it is not a Native of that Country, it is certainly well known to the Inhabitants.

Pseudo-Cytisus, Offic. *Cytisus Hispanicus arboreus*, Park. Theat. *Cytisus foliis subrusa lanugine hirsutis*. C. B. Pin. It grows in Italy and Sicily, the Leaves are only used, and answer the Intentions of the other Species.

Aspalathus altera, Offic. *Aspalathus secunda trifolia quæ Acaria secunda*, Matthiolo trifolio, J. B. *Cytisus-Spartium aculeatum*, *Acacia trifolia dictum*, Pluk. Almag. Trefoil Acacia. It grows in Sicily and Italy, and the Juice is only used, which is astringent. *Dioscorides* says, it is a good Medicine for the Eyes.

Daucus, Carrot. Of this there are various Species, three of which are only used in Medicine. The first of these is *Daucus vulgaris*, or Wild Carrot, which is thus distinguished by Botanists. *Daucus vulgaris*, Boerhaav. Ind. Alt. *Pastinaca Sylvestris tenuifolia Dioscoridis, vel Daucus officinarum*, C. B. Pin. The Seed infused in Ale is esteemed no despicable Diuretic, and excellent to prevent the Stone, and alleviate its more violent Fits. It also expells Gravel and provokes Urine, and the Menfes; nor is it less beneficial in all uterine and hysteric Disorders. *Helmont* says, that he was acquainted with a Lawyer, who every fifteen Days was troubled with a Fit of the Stone, and was for several Years freed from the Racks of that violent Disorder, only by an Infusion of two Drams of this Seed in some clear Malt Liqueur; an Infusion of two Drams of this Seed in white Wine drank, cures hysteric Paroxysms. *Tragus* as well as several others, highly recommended the small Purple Flowers which grow in the Middle of the Umbels, as an infallible Antidote against an Epilepsy.

The second Species used is the *Daucus sativus, radice atrorubente Pastinaca, tenuifolia, sativa, radice atrorubente*, C. B. P. *Pastinaca sativa, sive Carota rubra*, J. B. Dark

red rooted Garden Carrot. The Virtues of the Seeds and Herbs differ nothing at all from those of the *Daucus officinarum*. By *Schroder* they are esteemed a Specific in hysteric Fits. The Roots are frequently used in Food, tho' they are flatulent. They are thought to render the Body soluble and contribute to the Cure of a Cough. *Quercitan* affirms, that Half a Dram of the Seeds, of white Carrot, dried, reduc'd to a Powder, and exhibited with Baum Water is a Specific against hysteric Fits.

The third Species is the *Daucus Mariimus Lucidus*, T. *Gingidium folio Chærophilli*, C. B. P. Boerh. Ind. Alt. In the History of Plants ascrib'd to *Boerhaave*, we are inform'd, that the Root is much celebrated, for its Efficacy against the Stone and nephritic Disorders, and for provoking the Menfes; that the Seeds gather'd in a proper Season, are possessed of a certain Acrimony, and when infused in Beer, are highly beneficial in the forementioned Disorders. Empirics rasp the Root, and boil the Raspings in Milk which they sweeten with Honey, and exhibit in all Disorders of the Breast, and in Quinseys. They also order it externally, to hinder Ulcers from contracting a Crust. They give it in Child-bed Pains, Colics and Stranguries.

Delphinium hortense flore majore & simplici, Tourn. Just. Boerh. Ind. A. Larks-Spur. This is cultivated in Gardens and flowers in July. The Root, which is the only Part used is vulnerary, being of a consolidating and conglutinating Nature. It is also said to quicken and corroborate the Sight.

Dens Caninus, Offic. *Dens Canis latiore rotundioreque folio*, C. B. P. Raii Hist. Dogs-tooth Violet. This is found at the Foots of some Mountains, and flowers in April. The Root, which is the only Part used, mitigates

mitigates colical Pains, is beneficial to epileptic Children, expells Worms, is a Stimulus to Venery, and nourishes the Body.

Dens Leonis Taraxacum, Offic. *Dens Leonis latiore folio*, Tourn. Inst. Boerh. Ind. Alt. Dandelion. This is found every where in Gardens and Pasture Grounds. It flowers thro' the whole Summer. The Root and Leaves are used, and agree in Virtues with Endive, tho' they operate more powerfully. It is principally prescrib'd in putrid and inveterate Fevers, as also in a Phthisis, Consumption Scurvy, and Cachexy.

Another Species of this is the *Dens Leonis tuberosa radice*, Tourn. Inst. *Cichoreum bulbosum*, Raii Hist. Bulbous Succory. This grows on the Sea Coast. The Bulbs of the Roots are used, being accounted Anodyne and proper for removing the Kings-Evil.

Dentaria, Offic. Ind. Med. *Dentaria heptaphyllos*, C. B. Pin. Raii Hist. Tooth-wort. This is frequently to be found in the Gardens of Botanists, flowers in April, and is thought to be of a drying and astringent Nature.

Dentillaria, Offic. Ind. Med. *Lepidium Dentillaria dictum*, C. B. P. Lead-wort. This grows spontaneously in France and Italy, and flowers in August. The Herb itself is used, being of a caustic Quality and thought proper to remove the Tooth-ach if applied to the Wrists or only held in the Hand.

Dittamnus. Dittany, of this there are two Species, The first of which is the *Dittamnus Creticus*, Offic. C. B. P. Park. Theat. Boerh. Ind. A. Dittany of Crete, or Candy. The true Dittany grows chiefly in the Island of Crete or Candy, and flowers in June, the Leaves being only used. Geoffrey informs us, that the Leaves have always been looked upon as an excellent Vulnerary, a powerful Cor-

dial, as also an Emmenagogue and Diuretic. They have all the Virtues of the Garden *Pulegium* or Pennyroyal, but in a much greater Degree, for not only when drank, but also when barely applied or used in Fumigations they expel the dead Foetus. The Herb applied draws out Splinters from the Soles of the Feet, or any other Parts of the Body, and is good against Pains of the Spleen by diminishing that Part. It accelerates the Birth, and the Juice drank in Wine relieves those who are bit by venomous Animals, which are driven away by the bare Smell of the Herb, but killed by the Touch. The Juice instilled into venomous Wounds or Bites, and drank at the same Time is a present Remedy. It is cordial, alexipharmic, uterine, cephalic, and kills Worms in the Body. It is an Ingredient in the *Pulvis e Myrrha Compositus*, *Species e Scordio sine Opio*, *Mithridatum & Theriaca Andromachi*.

Digitalis, Offic. *Digitalis purpurea, folio aspero*, C. B. Pin. *Digitalis vulgaris purpurea*, Park. Theat. Fox Glove. It grows in Woods and Hedges and flowers in June. This Plant is emetic and vulnerary and agrees in Virtues with the *Pilewort*. The Ointment of Fox Glove is very resolvent, and the Decoction of it purges very powerfully both upwards and downwards.

Dipsacus sylvestris, aut virga Pastoris major, C. B. *Dipsacus sylvestris, five labrum Veneris*, Offic. *Dipsacus sylvestris*, Park. Wild Teasel, it grows upon Banks and in the Borders of Fields and flowers in June and July.

Dipsacus sativus, C. B. *Dipsacus sativus, Carduus Fullonum*, Offic. Manured Teasel. This Plant is cultivated in Fields and flowers in July. The Wild and Manured Teasel agree in their Virtues. They cure the Scrofula and resist Putrefaction, and when boiled in Wine they purge by Urine as effectually as Asparagus.

The Root bruised and mixed with Honey, has been found of extraordinary Virtue in Consumptions, which have been regarded as desperate.

Dipsacus sylvestris, capitulo minori, vel virga Pastoris, C. B. Boerh. Ind. A. *Virga Pastoris*, Offic. Shepherds Rod. It grows in moist and watery Places, by the Sides of Hedges, and flowers in *July*. The Leaves are only used in Medicine, the Water of which *Aegineta* commends for a depraved Appetite in Women; and a Dram of the Powder is exhibited for Spitting of Blood.

Doria Narbonensium, Boerh. Ind. A. *Virga aurea major, carnosis succulentis foliis ad caulem latis*, Hist. Oxon. *Herba Doria*, Offic. Dorias Woundwort. It grows on the Banks of Rivers, and flowers in *July* and *August*. It is an excellent Vulnerary, and in Virtues agrees with the Golden Rod.

Doria quæ Jacobæa Alpina, foliis longioribus serratis. Boerh. Ind. Alt. *Solidago saracenica vera, salicis folio*, Park. *Consolida saracenica, Solidago*, Offic. Saracens Confound. It flowers in *September*, and the Leaves are only used, which are an excellent Vulnerary, and may be properly exhibited both internally and externally. They heal Fistulas, and cleanse and consolidate malignant Ulcers.

Doronicum, Offic. *Doronicum vulgare*, Park. *Doronicum majus officinarum*, Ger. Leopards Bane. It grows in many Places upon the *Alps* and flowers in *May* and *June*. The Root is the only Part used, tho' but very seldom. It is likewise produced in the Gardens of the Curious, and is heating, drying, discutient and alexipharmic.

Doronicum minus, Offic. *Doronicum plantaginis folio*, C. B. *Doronicum folio fere, Plantaginis oblongo*, J. B. Lesser Leopards Bane. The Part in Use is the Root which differs

nothing in Virtues from the former, and is indiscriminately taken for it.

Doronicum radice dulci, C. B. Pin. *Doronicum Brachiata radice, Doronicum radice repente*, Creeping Leopards Bane. The Huntsmen and Shepherds who live in the Mountains, call this Plant by the Name of *Wild Goats Root*, and account it, together, with the largest Sort of *Doronicum*, as effectual a Remedy against the *Vertigo*, as the *Auricula Urſi* with a yellow Flower, and affirm it to be of extraordinary Use for confirming their Strength.

Draba, Offic. *Draba multis flore albo*, J. B. *Draba Lepidium humile incanum arvenſe*, Tourn. Inst. Arabian Mustard, or Turkey Cresses. This is cultivated in Gardens, and flowers in *June*. The Herb and its Seeds are used. In *Cappadocia*, the Herb is boil'd in Ptisans; and the Seeds when dried, are used instead of Pepper, for seasoning Aliments.

Draco herba, Boerh. Ind. Alt. Raii Hist. *Dracunculus*, Offic. *Abrotanum Lini folio acriori & odorato*, Tourn. Inst. Tarragon. This is cultivated in Gardens, and flowers in *July* and *August*. As this Plant is possessed of a great Degree of Acrimony, so it powerfully heats, dries, attenuates, and digests; for which Reason, according to *Matthiolum*, it is good for a cold Stomach; it also excites the Appetite, dissipates Flatulences, strengthens the Limbs, provokes Urine and the Menſes, and opens Obstructions.

Draco arbor, Park. Theat. C. B. Pin. *Palma foliis Longissimis pendulis absque pedunculo ex caudice glabro Enarvis*, Boerh. Ind. Alt. The Dragon Tree. This grows in *Porto Santo*, which is one of the *Canaries*, and in *Madera*. Dragon's Blood, is the Gum of this Tree. This is a Resin of a redish Colour, easily melted by the Fire, and kindling into Flames, when

when thrown into it. There are two Sorts to be met with in the Shops, which only differ in being more or less pure. The Curious, generally take the Dragons Blood of the Moderns, for the Cinnabar of *Dioscorides*. This Gum is a powerful Drier, Astringent and Repellent, but is principally used externally, for drying up Defluxions, stopping Hemorrhages, conglutinating Wounds, and fastening loose Teeth. The late *Helvetius*, melted it with powder'd Alum, and then made them into Pills, for stopping Diarrhœas, Hæmorrhages, and the like; but the Patient ought to be prepar'd, by Bleeding, and other proper Management.

Dracontium, Offic. *Dracontium majus*, Ger. Raii. Hist. *Dracunculus polyphyllus*, C. B. Pin. Boerh. Ind. Alt. Dragons Blood. This is cultivated in Gardens. The Herb and its Root are used, and are said to be alexipharmic and sudorific. They are principally recommended in the Plague, malignant Fevers, and the Bites of venomous Animals.

Dracunculus major, Offic. *Dracunculus Bistorti folio*, C. B. Pin. Great Dragons. This grows spontaneously in *Virginia*. Its Root is heating, drying, and beneficial against Orthopnœas, Ruptures, Convulsions, Coughs and Defluxions.

Dryopteris, Offic. *Dryopteris adversariorum*, Ger. *Felix Querna*, C. B. *Felix minor non Ramosa*, Tourn. Inf. Oak-fern. This grows in marshy and putrid Soils. This Plant triturated, is used for banishing Fleas. But *Rondeletius* affirms, that it is prejudicial, when put into Medicines, instead of the Polypodium. In some of the Shops, it is found under the Title of the *Adiantum Album*.

Ebenus Æthiopica, Offic. *Palma Americana spinosa*, C. B. Pin. Raii Hist. The Macow or Ebony Tree. What

we have grows in *America*, and is from thence brought to us; the Part only in Use is the Heart or medullary Substance of the Wood, which is black and extremely hard, and was by the Antients accounted good for the Eyes. The Powder of it according to *Pliny*, is esteem'd a Specific for the Eyes, and the Wood triturated with *Passum* is said to cure Dimness of Sight. *Zacutus Lusitanus* says, it is of Service in flatulent Convulsions. Ebony, according to *Dioscorides*, has a deterfive Virtue, in cleansing the Pupil of the Eye from whatever darkens the Sight, and is good for inveterate Rheums and Pustules in the Eyes. If it is used instead of a Stone in Triturations for preparing of Collyria, these Medicines will have the better Effect. An excellent Ingredient in Collyria is prepared of the Dust or Shavings of Ebony macerated a Day and a Night in *Chian* Wine, and then carefully triturated. They burn it also according to *Dioscorides* in a crude and unbaked earthen Pot, till it is reduced to Coals, and then wash it in the same Manner as burnt Lead. When thus prepared it is very effectual in dry and scurfy Ophthalmies.

Echinopus major, J. B. Boerh. Ind. A. *Crocodilion*, Offic. Globe Thistle. This Plant is cultivated in Gardens, and flowers in Summer. The Root and Seeds are used in Medicine. The Root drank excites a copious Hæmorrhage at the Nose, and is given with good Success in all Disorders of the Spleen, and the Seeds provoke Urine.

Echinopus, folio Acanthi aculeati tenuiter laciniato, flore albo, Boerh. Ind. A. *Spina Alba*, Offic. *Carduus Sphærocephalus capitulo longis spinis armato*, C. B. Prickly Globe Thistle. With us this Plant is cultivated in Gardens, and flowers in Summer. The Root and Seeds are both used in Medicine. The Root is effi-

cacious

cacious in the cæliac Passion, provokes Urine, and us'd in a Decoction cures the Tooth-ach. The Seed helps Convulsions in Infants, as also the Bites of Serpents.

Echinopus folio Acanthi aculeati tenuiter laciniato, flore albo, Boerh. Ind. Alt. *Spina Arabica*, Offic. *Carduus Spinosissimus Sphærocephalus rigidis aculeis armata*, C. B. *Carduus Spinosissimus Sphærocephalus Cardui arabici* Nomine missus, Park. Theat. *Arabian Thistle*. It grows in Gardens and flowers in Summer, the Root and Leaves being used. The Leaves as well as the Root are good in stopping Hemorrhages, the Menfes, and other Fluxes.

Echinopus minor, J. B. Ritro, Offic. *Carduus Sphærocephalus cæruleus minor*, C. B. Little Globe Thistle. It grows in Gardens and flowers in June. The Root is only used, and agrees in Virtues with the foregoing.

Echium, Offic. *Echium vulgare*, C. B. Pin. Boerh. Ind. A. Vipers Bugloss. This is found by Path-ways and the Sides of Roads, and flowers in June. Some prescribe the Roots in an Epilepsy, and perternatural Heats, and *Dioscorides* says, they are good in Pains of the Loins.

Echium Egyptiacum, ferox, flore albo, Boerh. Ind. A. *Lycopsis*, Offic. *Echium Orientale longioribus floribus*, Hist. Oxon. Wall Bugloss. This is an Asiatic Plant, and the Root is used in Medicine, which when made into a Cataplasm with Oil is a good Vulnerary, and when mixed with Barley Meal is a good Topic in an Erysipelas. When triturated and used by Way of Uction with Oil it provokes Sweat.

Elæagnus, Offic. *Gale frutex odoratus septentrionalium*. *Elæagnus*, Cordo Raii Synop. *Rhus myrtifolia belgica*, C. B. Pin. Dutch Myrtle, or Gaule. This grows in marshy

Places. Its Leaves are used, which dry, discuss, and kill Worms.

Elaterium, Offic. *Cucumis Sylvestris, asininus dictus*, Boerh. Ind. Alt. *Cucumis Sylvestris sive asininus*, Raii Hist. Wild Cucumber. This Plant is one of the most drastic Hydragogues in all the *Materia medica*; for the Elaterium of the Shops, is no more than a certain Preparation of its expressed Juice. In order to render the Preparations from this Plant more mild and gentle, Mr. Boulduc has been at incredible Pains, and in the Course of his Experiments found, that this Plant has scarcely any sulphureous Principles, because Brandy and Spirit of Wine, hardly act upon it at all, and because the Principles they draw from it, are only Salts dissolved, and carried off not by the Sulphur of these Menstruums, but by the Phlegm they always retain. The wild Cucumber, then, only contains saline Parts, in which its Virtues consist; and as it is a strong Purgative, we may from this Circumstance conclude, that Salts are as properly Purgatives as Sulphurs; tho' this Quality is not so generally ascribed to the former as to the latter. But after an incredible Number of Experiments, sometimes on one and sometimes on another Part of this Plant, Mr. Boulduc found, that an Extract from its dried Root, was the best Preparation he could obtain from it, since it was at once a mild and powerful Hydragogue. The Dose is from twenty-four to thirty Grains, in Conjunction with a few Grains of Mechoacan or Rhubarb, and Salt of Wormwood incorporated with Extract of Juniper. The same Author dried the wild Cucumber very well, and reduced it, together with its Seeds to a Powder, which he found a very good Hydragogue. There are two Sorts of *Elaterium* mentioned by the

the Antients. That of *Theophrastus* which is green, and in all probability made of the inner Substance of the Pulp of the Fruit, and that of *Dioscorides* made only of the thin and waterish Parts, which is white, and for that Reason accounted best by him and *Mesue*. The Green, is not half so strong, in promoting any Evacuations, either by Vomit or Stool, as the White; one Grain of which dissolv'd in any Liquor, operates very powerfully on People of weak Constitutions. This Medicine powerfully eliminates aqueous, and viscid Humours, collected about the Joints. The Juice of the Root produces the same Effect, and is, therefore, properly used in Clysters, or laid as a Poultice, to the Parts affected, in sciatic Pains. This Juice, also, when boil'd with Wormwood, in Water and Oil, cures inveterate Megrims, if the Temples are frequently bath'd with it, and some of the Leaves and Roots, beaten together, and applied to them as a Poultice. When this Juice of the Root, is injected into the Nostriils with Milk, it is said to produce the same Effect; when mix'd with Goat's Dung, and applied by Way of Plaster, to any Tumors or hard Swellings, it is said powerfully to resolve them. According to *Mesue*, the Juice not only of the Fruit, but also of the Root, or a Decoction of either, if drank, affords Relief in the Dropsy, Jaundice, and all Obstructions of the Liver and Spleen. *Dioscorides*, for the Cure of a Dropsy, orders Half a Pound of the Roots to be bruised, and put into three Quarters of a Pint of strong Wine, three Ounces of which, are to be exhibited for three or four Days, till the Dropsy is remov'd, which it carries off without creating any Uneasiness to the Stomach. According to *Castor Durantes*, a few Grains of Elaterium, mix'd with

Conserve of Roses, will produce the same Effect. The Powder of the Root, mix'd with Honey, removes the Marks of Sugillations. The Root, boil'd, or steep'd in Vinegar, cures the Morpew, and removes Specks and Freckles. The Powder of the dried Root, according to *Dioscorides*, cleanses the Skin of the Face, from all Scurf, and the unseemly Remains of Scars. The Juice of the Leaves dropt into the Ears, removes Pains, Noise, and Deafness. In the Shops, the Root of the wild Cucumber, is generally used as a Succedaneum, for that of the Coloquintida, or bitter Apple, since the latter is not so easily obtain'd as the former. Mr. *Soam* informs us, that a certain Empiric used to give two Pills, of the Size of Chiches, composed of wheaten Meal, and the Juice of the wild Cucumber, to Patients labouring under a Dropsy. After this, with a Lotion for the Legs, made of a Decoction of the Stalks, he drew the Matter downwards, and then exhibited another Dose of his Pills, and by this Means, perform'd many Cures.

Elemi. A Gum bearing the same Name, and produc'd by a Tree thus distinguish'd. *Arbor brasiliensisibus Gummi Elemi simile fundens, foliis pinnatis, flosculis verticillatis, fructu Olivæ, figura & Magnitudine*, Rai Hist. The Gum Elemi Tree. This Gum heats, mollifies, digests, resolves, maturates, alleviates Pain, and is beneficial in Disorders and Wounds of the Head and Nerves; and in particular, it is a Specific for Wounds of the Cranium. It is, also, good for Contusions of the Joints, and provokes Urine and the Menfes.

Emerus, Offic. *Emerus minor*, Tourn. Inst. Scorpion Sena. This grows in mountainous Places, and flowers in June. Its Leaves are used, but *Boerhaave* says, he knows

of no medicinal Virtues ascrib'd to them. But according to *Ruppis*, the common People substitute them, in the Room of *Sena* Leaves.

Empetrum, Offic. *Thymelea foliis Kali lanuginosis, salsis*, Raii Hist. *Sanamunda altera Clusii*. Sea Heath Spurge. It grows spontaneously on the Coasts of *Bætica*, or *Andalusia*. The Root, is the Part used in Medicine, a Dram whereof taken in a Decoction of *Chichos*, purge pretty much.

Ephedra, Offic. *Ephedra maritima major*, Boerh. Ind. *Equisetum Polygonoides bacciferum majus*, Hist. Oxon. Sea Grape, or shrub Horse Tail. It grows in *Sicily*, and other maritime Places. The Fruit is used in Medicine, which drank in Wine, helps the *Cœliac* Passion, and Women labouring under uterine Fluxes.

Ephemerum, Offic. Deadly Saffron. It grows in Woods and shady Places. A Decoction of the Root, is a great Preservative for the Teeth, if they are wash'd with it, and the Leaves, boil'd in Wine, discuss Tumors, and Tubercles, which have as yet contracted no Moisture.

Epimedium, Offic. Boerh. Ind. *Epimedium quorundam floribus purpureis, cum apicibus luteis*, Chab. *Barren Wort*. With us, it is cultivated in Gardens. The Leaves and Root are used, both of which, effectually cause Abortion.

Equisetum palustre brevioribus foliis, polyspermum, C. B. Pin. *Polygonum fœmina*, Offic. *Equisetum alterum brevioribus setis*, Park. Theat. Female Horse Tail. It grows in Lakes and Pools, and by the Sides of Rivers, and is esteem'd a vulnerary Plant.

Equisetum majus, Offic. Ger. Raii Hist. Great wild Horse Tail. This grows in Marshes, and watery Soils. The Stalks and Leaves are used, and

agree in Virtues with the *Equisetum arvense longioribus Setis*.

Equisetum arvense longioribus Setis, C. B. Pin. Boerh. Ind. Alt. *Cauda Equina minor & Equisetum minus*, Offic. Corn Horse Tail. It grows among Corn, in moist Places; it is Vulnerary, inspissating and astringent; and is principally used in stopping Hemorrhages, proceeding from an *Anaestomosis*, or a *Diæresis*; as, also, Exulcerations of the Kidneys and Bladder.

Erica, Offic. *Erica vulgaris humilis, semper virens, flore purpureo & albo*, J. B. *Erica vulgaris glabra*, Boerh. Ind. Alt. Common Heath. It is common in Thickets, and flowers in *June*. The Flowers is the Part used, the distill'd Water whereof, takes away Redness of the Eyes, and eases their Pain, and is with Success exhibited in the Colic. Fomentations, and hot Baths made of the Flowers, are said to cure gouty and paralytic Patients.

Erigerum, *Senecio*, Offic. *Senecio vulgaris*, Park. Raii Hist. Groundsel, or Simson. This grows in Fields and cultivated Grounds, and may be had at all Seasons of the Year. The Herb itself is used, and said to be beneficial in the Cholera, Jaundice, Intemperance of the Blood, sciatic Pains, and excessive menstrual Discharges. Externally, it is applied to remove Inflammations of the Breasts, Scald Head, King's Evil, Pains of the Stomach, Retention of Urine, the Gout, and Wounds.

Eruca, Offic. *Eruca latifolia alba sativa Dioscoridis*, C. B. Pin. *Eruca major sativa, annua, flore albo, striato*, J. B. Garden Rocket. It is planted in Gardens. The Seeds are the Part used, which are warming and drying, and are chiefly used to provoke Venery, and in Anti-apoplectic Medicines.

Eruca

Eruca Sylvestris, Offic. *Eruca sylvestris major lutea, caule aspero*, C. B. Pin. *Eruca sylvestris major, vulgarior foetens*, Hist. Oxon. Wild Rocket. It grows upon old Walls, and flowers in June. The Seed is the Part used; it violently expels Urine, and is much more acrid than the Garden Sort.

Ervum verum, Tourn. Inst. *Orobis*, *Ervum*, Offic. *Orobis sativus sive Ervum semine anguloso, siliquis inter Grana junctis*, Hist. Oxon. Bitter Vetch. It grows, tho' seldom, in our Gardens, and flowers in June, but is much more common in Italy, and some Parts of France. The Parts in Use, is the Seed, which is an angulous, roundish, brown, reddish Grain, of a leguminous, bitterish, and disagreeable Taste, and contains a farinaceous Substance, not unlike Fenugreek, as, also, a diuretic Salt; in Consequence whereof, it is recommended for expelling the Stone.

Eryngium, Offic. *Eryngium maritimum*, Boerh. Ind. Alt. Hist. Oxon. Eringo. It grows in sandy Places, by the Sea Side, and flowers in June and July. The Root only is used, which is hepatic, nephritic, and alexipharmic; it is chiefly used in Obstructions of the Menfes, and Urine, and of the Liver, Gall, Spleen, and other Parts; and consequently, is effectual in the Jaundice and Colic.

Eryngium vulgare, Offic. Boerh. Ind. Alt. *Eryngium mediterraneum seu Campestre*, Park. Theat. Common Eringo. This Plant, is rarely found in England, tho' common enough beyond Sea; it flowers in June. Its Root is the Part used, and agrees in Virtues with the foregoing.

Eryngium trifolium, Offic. Trefoil Eringo. It grows in the Gardens of the Curious. The Root, which is the Part used, provokes

Urine, and is a Stimulus to Venerary.

Erysimum, Offic. *Erysimum vulgare*, Boerh. Ind. Alt. Hedge Mustard. It grows near Hedges and old Walls, and flowers in June. The Plant, as well as the Seed, are used, which are heating, drying, attenuating, aperient, help to expectorate viscid Phlegm from the Lungs, and are good against an habitual Cough. *Riverius* commends a Decoction of it in Wine, against a Colic.

Erysimum latifolium, Offic. *Erysimum Monspeffulanum Sinapios foliis*, Raii Hist. Broad leaved Hedge Mustard. The Herb is used, and agrees in Virtues with the preceding.

Euonymus, Offic. *Euonymus vulgaris granis rubentibus*, Boerh. Ind. Alt. *Euonymus multis, aliis Tetragnia*, J. B. The Spindle Tree. It is frequent in Hedges, and flowers in May. The Fruit is used, which provokes Vomiting, and purges by Stool; the whole Plant is noxious, and taken inwardly not without Danger; outwardly applied, it is emollient and resolvent, kills Lice, and deterges furfuraceous Disorders of the Head.

Eupatorium cannabinum, C. B. Pin. *Eupatorium Avicenna*, *Eupatorium cannabinum*, Offic. *Eupatorium Cannabinum vulgare foliis trifidis profunde dentatis*. Hemp Agrimony. It grows by the Sides of Rivers, and flowers in July. The Herb is used, which is hepatic and vulnerary, and is principally used in a Cachexy, Catarrh, and Cough; it is likewise efficacious, in a Stoppage of the Urine and Menfes. According to *Schroder*, externally applied, it is one of the most noble Vulneraries, and the Root purges, like White Hellebore, according to *Gesner*.

Euphorbium, Offic. *Euphorbium verum Antiquorum*, Raii Hist. Boerh. Ind. Alt. The Euphorbium Tree.

It

It grows in the *East Indies*. The Part in Use, is the Juice, which is call'd *Euphorbium*, and is a gum-mous and resinous Substance, which most powerfully purges, and expels all ferous and watry Humours from the whole Body, but must not be given to dropical Patients unless such as are of a very strong Constitution, it is with good Success applied externally in a Caries of the Bones, but great Care must be taken never to apply it to Ulcers of the Fauces, Nose, Palate, or Tongue; applied to the Nose it provokes Sneezing.

Euphrasia, Officinarum C. B. P. Boerh. Ind. A. *Euphrasia vulgaris*, Park. Eye Bright. It grows in Meadows, and flowers in *July*. The Herb is used, which is Ophthalmic and Cephalic; it is principally used in all Disorders of the Eyes, and a decayed Memory.

Faba, Offic. *Faba Bona major*. Hist. Ox. *Faba flore candido, lituris nigris conspicuo*, Tourn. Inst. Garden Beans. They are sow'd in great Numbers in our Gardens for the Use of the Kitchens. The Flowers, Pods, and Beans are used; its Virtues consist in its being adhesive, refrigerating, drying, incrassating, and extergent; it is useful internally applied in a Diarrhæa and Lientery; externally applied it removes Freckles and other cutaneous Disorders; the Water of the Pods mitigates the Gripes in Children.

Faba minor seu Equina, C. B. P. The small or Horse Bean. They are sow'd in Fields, and flower and ripen somewhat later than the Garden Bean, and are considerably smaller, they are externally applied for the same Purposes as the preceeding, but are mostly consumed in Food for Horses.

Faba sancti Ignatii, Offic. *Igasur*, seu *Nux vomica legitima Serapionis Camelli*, *Faba sancti Ignatii vulgo*, Raii Dendr. *Nux Pepita*, seu *Faba*

sancti Ignatii. Act Philof. Lond. St. Ignatius's Bean; this Fruit is brought to us from the *East Indies*. It resists Poison, cures quartan Fevers, provokes Urine and the Menfes, induces a Vertigo, and excites Vomiting.

Faba Ægyptia, Offic. *Faba Ægyptia Dioscoridis et Theophrasti cujus radix Colocassia dicebatur*, Park. Theat. *Nymphæa glandifera Indiæ paludibus gaudens, foliis umbilicatis, amplis, pediculis spinosis, flore roseo purpureo, et flore albo*, Pluk. Almag. Egyptian Bean. It grows in *Ægypt*; the Root is only used, which has an astringent Faculty, is good for the Stomach, and is very efficacious in Dysenteries, and the *Cœliac* Passion. The Root triturated and mixed with Sugar in the Form of a Conserve is efficaciously exhibited in the *Hæmorrhoids*. The extracted Juice of the Flowers stops an immoderate Flux of the Menfes.

Fagopyrum, Offic. *Fagopyrum vulgare erectum*, Elem. Bot. *Fagotriticum*, J. B. Buck-wheat or Brank. It is sown in Fields and flowers in *July*. Its Seed is only used, which affords less Nourishment than Barley or Rye, yet more than Panic or Millet, Broths and Ptisans made of the Flour are easily digested, and they greatly help Coughs and a Difficulty of Urine.

Fagus, C. B. Pin. Boerh. Ind. A. *Fagus Latinorum Oxya Græcorum*, J. B. The Beech-tree. It grows frequently in Woods and Hedges in the Southern Parts of *England*, tho' *Cæsar* in his *Commentaries* denies it to be of *English* Growth; the Mast is in Use, and has the same Properties and Virtues which the Chestnut is possessed of. Its Fruit and Seeds expell the Gravel and Mucus from the Kidneys. The Water found in the Clefts of old Beech Trees, as *Tragus* affirms, cures Scabs, Itch, Tetters, and all other cutaneous Itchings. The fresh Leaves of the Beech

Beech bruised and applied hot to Tumors, discufs them, and corroborate the Limbs when affected with a Numbness. Chew'd they are an excellent Remedy for the Disorders of the Lips and Gums. Mixed with Hogs-lard and applied hot to the Region of the Loins, they are said by some to be excellent for the Stone. The Mast eaten plentifully, especially when green, are said to disturb the Head like Lolium or Darnel.

Ferrum Equinum, Offic. *Ferrum equinum Germanicum siliquis in Summitate*, C. B. Pin. *Ornithopodio affinis, vel potius Solæ aut Ferro Equino herba*, J. B. Tufted Horse shoe Vetch. It grows in Chalky Places and flowers in June, the Herb is in Use, which is esteem'd astringent and stops Bleeding.

Ferula fruticosa semper virens, foliis Anisi, Galbanifera, ex qua Galbanum, Offic. Par. Bat. Prod. *Galbanifera Planta*. Offic. *Oreoselinum Anisoides, arborescens, Ligustici foliis et facie, flore luteo Capitis bonæ Spei*, Breyn Prod. The Galbanum Plant. It grows in the Gardens of the Curious; from this Plant distills the *Galbanum* of the Shops.

Ferula Africana, Galbanifera frutescens Myrrhidis folio, C. Comm. Hort. Amst. Another Galbanum Plant. This Plant as well as the former, being wounded emits a milky Juice, which concretes into a Substance in every respect resembling Galbanum.

Ferula Galbanifera, J. B. *Ferula latiore folio*, Park. Theat. *Ferulago latiore folio*, C. B. Pin. Small Fennel Giant. It grows in most Physick Gardens. *Lobelius* says, that it was first produced from a Seed found in the Tears of Galbanum at *Antwerp*.

Ferula, Offic. *Ferula major seu fœmina Plinii*, Boerh. Ind. A. *Ferula tenuiore folio, seu fœmina Plinii*, Hist. Oxon. Fennel Giant. It grows

in Physick Gardens, and flowers in June. The Parts used in Medicine, is the Medullary Substance of the Stalks, the Seed, and Juice or Gum called *Sagapenum* in the Shops. The Pith of the green *Ferula* drank is good for Spitting of Bloods, and helps those that labour under the Cæliac Passion, stops Eruptions of Blood, and eases the Head-ach, the Seed drank relieves the Gripes, the Stalks which are commonly pickled, eaten as Food, produce a Head-ach.

Ferula minor ad singulos Nodos umbellifera, Boerh. Ind. A. *Panax Asclepium*, Offic. *Libanotis quibusdam, flore luteo, semine Ferulæ*, J. B. The All-Heal of *Esculapius*. It grows in *Istria*, and flowers in Summer, the Parts used in Medicine are the Flowers and Seed, which when bruised and applied with Honey are excellent against Phagedenic and other Ulcers and Tubercles; they are also effectual against the Bites of Serpents, when drank in Wine.

Ficus, Offic. *Ficus vulgaris*, Park. Theat. *Ficus communis*, Boerh. Ind. The Fig-tree. It grows frequently in Gardens and Orchards in hot Climates; the Fruit is used both green and dried, they are both moistening and pulmonary, are good for Coughs, cure the Gravel in the Kidneys or Bladder, and resist Poison, they are of singular Use in the Small Pox and Measles, they are maturing, emollient and drawing, whence they are efficacious against all pestilential Bubbles.

Ficus sylvestris *Discorides*, C. B. Pin. *Caprificus*, Offic. *Ficus sylvestris sive Caprificus*, Jons Dend. The Wild Fig-tree. It grows in Greece and other warm Countries, the Fruit is used, which possesses the same Virtues as the Garden Species.

Ficus Indica, Offic. *Ficus Indica arcuata*, Chab. *Ficus Indica foliis mali cotonei similibus, fructu ficibus simili ex Goâ*, C. B. Pin. The Indian Fig.

Fig-tree. It grows in the *East-Indies*, the Fruit is used, and agrees in Virtues with the common Fig.

Ficus folio Mori, fructum in Caudice ferens, C. B. Pin. *Sycomorus*, Offic. *Sycomorus sive Ficus Ægyptia*, Park. Theat. The *Ægyptian* Sycamore; it is found in *Ægypt* and some other Places, the Parts used are the Fruit and Gum; the Fruit is refrigerating, moistening, and laxative, and cures hard Tumors. The Gum is good against the Plague and Poisons.

Ficus Cypria, Offic. *Ficus sylvestris cretica folio non diviso, leviter crenato*, Tourn. *Sycomorus altera sive Ficus Cypria*, Park. Theat. The *Cyprian* Sycamore-tree. Its Name shows it a Native of *Cyprus*, the Fruit is only used which has all the Virtues of the preceeding Species.

Filago seu herba Impia, Tourn. Just. *Gnaphalium*, Offic. *Gnaphalium vulgare capitulis rotundis sessilibus ad angulos floridum*, Hist. Oxon. Common Cudweed. It grows in dry Places and flowers in *June*. The Leaves are used, the distilled Water whereof is good against Cancers in the Breast, they are drying and astringent, and consequently good against all Hæmorrhages, Dyenteries, too great a Discharge of the Menfes, and also a Quinsey.

Filago alpina capite folioso, Tourn. Inst. *Gnaphalium alpinum*, Ger. Lion's Foot. It grows in mountainous Places, and flowers in *July*. The Herb bruised and boil'd in Oil, is apply'd to Sugillations and Bruises.

Filipendula, Offic. *Filipendula vulgaris, an Molon Plinii?* C. B. Pin. Boerh. Ind. A. Dropwort. It grows in Fields and Meadows, and flowers in *June*. The Root and Herb are both used, the Plant is diuretic, and is principally used when a tartareous Mucilage affects the Lungs, Reins, and Joints; in a flatulent Colic, and Fluor Albus, or too copious Fluxes of the *Lochia*. *Tabernæmontanus*

greatly commends the Powder and Juice against an Epilepsy, and *Boerhaave* advises the Leaves infused or boil'd, against a Jaundice.

Filix non ramosa dentata, C. B. Pin. Boerh. Ind. A. *Filix mas*, Offic. Common Male Fern. It grows in Hedges and shady Lanes; the Root is only used, and has the same Virtues as the *Osmund Royal*, for which it is often sold by the Herb-women. It is thought to be hurtful to the Female Sex, and to cause Abortion. It has a peculiar Efficacy against the Rickets, expels Worms and the Stone, and relieves those who labour under a Swelling of the Spleen.

Filix fœmina, Offic. *Filix ramosa major pinnulis obtusis, non dentatis*, C. B. *Filix ramosa repens vulgatissima*, Hist. Oxon. Female Fern, or common Brakes. It grows very frequent upon Commons and Heaths, the Root is used which is deem'd antisplenetic, astringent, and opening; it is chiefly used in Obstructions of the Bowels, as also of the Spleen and Uterus; outwardly applied it is reckoned good for Burns. The distilled Water of this Plant is esteem'd a specific Remedy against Worms, especially those of the flat Kind.

Flos Adonis, Offic. *Flos Adonis vulgo, aliis Eranthymum*, J. B. *Adonis hortensis flore minore atrorubente*, C. B. Pin. Boerh. Ind. A. Red Maithes. This grows in the Fields, but is rarely to be met with. It flowers in *June* and *July*. The Flowers are used, and according to *Parkinson*, are good for alleviating the Pains of the Colic and Gout.

Flos solis, Offic. Raii Hist. *Cbrysanthemum indicum maximum, annuum, non Ramosum*, Hist. Oxon. *Helenium indicum maximum*, C. B. Sun-Flower. This is cultivated in Gardens, and flowers in *August*. The Buds of the Flowers are used, and when boil'd, are said to be a Stimulus to Venery. The Seeds are

are accounted pectoral and good for extinguishing excessive Heat, but when eaten plentifully excite a Pain of the Head. This Plant is also said to be a Vulnerary.

Foeniculum, vulgare, Germanicum, Boerh. Ind. Alt. Foeniculum, Offic. Foeniculum vulgare, Raii Hist. Fennel or Fenicle. Tho' this Plant grows spontaneously in some Places on the Sea Coast, as also at *Woolwich* and *Gravesend*, yet it is most generally cultivated in Gardens, and flowers in *June*. The Leaves, Root and Seeds are used. The Root is one of the five aperient Roots, and the Seeds are classed among the great carminative Seeds. *Simon Pauli* informs us, that in putrid Fevers, attended with Malignity, there is no Plant more aperient and sudorific, than Fennel; whence nothing is more proper in the Small Pox, and Measles, than a Decoction of the Herb, or of its Seeds, or Roots. Distill'd Fennel-water dropt into the Eyes is by several Authors, said to be an excellent Preserver and Restorer of the Sight. The Seeds corroborate the Stomach, cure a Nausea, and Loathing of Food, and are an excellent Carminative. These Seeds are also possessed of an alexipharmic Quality, and when mixed with other Pectorals afford singular Relief in an Asthma. The Roots provoke the Menses, and Urine, are supposed to open Obstructions of the Liver and Spleen, and to cure the Jaundice.

Foeniculum dulce, Offic. C. B. Boerh. Ind. Alt. Foeniculum dulce, majori et albo semine, Tourn. Inst. Sweet-Fennel. This is imported from *Germany*, the Seeds are used, and are possessed of the same Virtues with those of the former. This is the Species of Fennel referr'd to in the last Colledge Dispensatory, in which a Simple Water is order'd to be drawn from it, and it is an Ingredient in the *Aqua Juniperi Composita*. De-

coct. Commun. pro Chyl. The *Oxymel ex allio*, Mithridate and the *Venice Treacle*.

Foeniculum sylvestre, Offic. Foeniculum sylvestre perenne, Ferula folio breviori, Tourn. Inst. Seseli perenne, folio glauco breviori, Boerh. Ind. A. Bastard Spignel. This grows in dry mountainous Places, and flowers in *June*. The Root is used, and when dried is extremely hot and emetic. Externally, it is accounted escharotic.

Foeniculum tortuosum, J. B. Raii Hist. Boerh. Ind. Alt. French Hartwort. This is found in the Gardens of Botanists, and flowers in *August*. The Seeds are used, which are white striated, and of an aromatic Taste, attended with some Degree of Acrimony. They are hot and dry, provoke Urine and the Menses, and enter the Composition of the *Theriaca Andromachi*.

Foeniculo simile millefolium aquaticum umbelliferum, Chab. Millefolium aquaticum umbellatum capillaceo, brevique folio, C. B. Pin. Water Fennel. This grows in marshy Places. The Herb itself is used, and thought to be vulnerary.

Fœnum Græcum sativum, C. B. P. Boerh. Ind. Alt. Fœnum Græcum, Offic. Fenugreek. It is sown in Fields and flowers in *June*. The Seed is used, which is emollient, digestive, maturating, discutient, pargoric, and are frequently used in emollient Clysters. It mitigates Ichtiadic Disorders, and discusses Tumors in the Breasts; triturated and made into a Cataplasm with Hydromel boiled, it is effectual against all internal and external Inflammations. Made into a Cataplasm with Nitre and Vinegar it extenuates the Spleen. The Decoction of Fenugreek used by Way of Infusion is effectual in Female Disorders, proceeding from an Inflammation or Obstruction of the Uterus; made into a Pessary with the Fat

Fat of a Goose it mollifies and dilates the Parts about the Region of the Uterus, the green Herb used with Vinegar is accommodated to such Parts as are relaxed and exulcerated. The Decoction is excellent in a *Tenesmus* and Dysentery, when attended with fetid Discharges. It is an Ingredient in the *Oleum e Mucilaginibus*.

Fragara, Offic. *Fragara major*, J. B. *Cubebis affinis Fragara major*, C. B. Pin. This is found in the *Philippine* Islands. The exterior Bark of the Berries, which is black, tender and of an aromatic Taste, being broken, exhibits a shining solid Seed which is heating and drying, and useful in cold Disorders of the Stomach and Liver. It also promotes the Concoction of the Aliments, but induces Costiveness.

Fragaria, Offic. *Fragaria vulgaris*, Boerh. Ind. Alt. *Fragaria ferens Fraga alba & rubra*, J. B. The Strawberry. This Plant grows in Woods, Gardens and Hedges, and flowers in *May*. The Leaves and Fruit are both used; the Herb is diuretic, and frequently used in a Jaundice, and is often an Ingredient in Gargarisms, Baths, and Cataplasms; the Fruit is cooling and moistening, good in splenetic and nephritic Disorders, and resists Poison. In tertian and quartan Fevers, it is used instead of the *Peruvian* Bark; the Seed is a good lithontriptic Remedy. One Inconvenience often attends the Use of Strawberrys, which is, that Toads and venomous Serpents greatly delight to be among them, and often poison the Fruit with their Saliva, Urine, or Breath; insomuch that they are said to have proved fatal to many. The Decoction of the Herb and immature Fruit is strengthening and astringent; the ripe Fruit is emollient, nutritive, relaxing, cooling, aperitive, and corrects Acrimony, and consequently is proper in burning Fevers,

under the highest Degree of Inflammation; the Fruit eaten cures a *Gonorrhæa*. The Pulp applied in a Cataplasm is excellent for all external Inflammations. *Gesner* observes, that those Strawberries which grow upon Hills and mountainous Places, are far preferable to those which grow in those which are low and watery.

Fragaria sterilis, C. B. Pin. *Fragarioides*, Offic. *Fragaria non frugifera vel non Vesca*, J. B. Barren Strawberry. It grows in barren Ground, and flowers in *May*, the Herb is astringent. It is said to agree in Virtues with the preceding.

Fraxinella, Ger. Emac. Tourn. Inf. Boerh. Ind. *Fraxinella vulgaris*, Park. Theat. Bastard Dittany. This is cultivated in Gardens, and flowers in *July*. The Bark of the Root is used and accounted cordial, alexipharmic, uterine, cephalic, and anthelmintic. It is principally used in malignant Disorders, Epilepsies, and other Diseases of the Head, as also in Obstructions of the Uterus.

Fraxinus, Offic. *Fraxinus excelsor*, C. B. Pin. Boerh. Ind. Alt. Common Ash-tree. It is common in Woods and Hedges, the Bark, Wood, Leaves, and Seed are used. The Bark is drying and attenuating, and softens the Hardness of the Spleen, it is diuretic and lithontriptic, and is of Service in intermittent Fevers, and it provokes Sweat. The Leaves dry powerfully, and cure the Bite of Serpents. The Seed is warming, greatly drying, and is serviceable in hepatic, pleuritic and nephritic Disorders. The Wood is a good Vulnerary, and is by some commended in the venereal Disease, and supplies the Place of the *Lignum sanctum*.

Fraxinus foliorotundior, C. B. Pin. *Mannifera Arbor*, Offic. The round leaved Ash. It grows in *Calabria* and

and *Italy*, the condensed Juice whereof is *Manna*.

Fucus maritimus, vel *Quercus maritima*, vesículas habens, C. B. Pin. Boerh. Ind. Alt. *Quercus marina*, Offic. Common Sea-wrack. The Herb is used, which is cooling, and is not only efficacious against the Gout, but also in all Inflammations. - *Fucus*, Offic. *Fucus marinus* *Rocella Tinctorum dictus*, *Alga Tinctoria*, J. B. An *Fucus*, five *Alga membranacea purpurea parva*, R. Synop. Purple Sea-wrack. It is found in the *Mediterranean*. *Nicander* advises the Use of this Herb against the Bites of Serpents.

Fucus folliculaceus ferratus, *Sargazo*, Mont. Exot. *Vitis marina* & *Lenticula Marina*, Offic. *Lenticula marina ferratis foliis*, Park. Theat. Sea Lentils. It is found upon Rocks by the Sea-side, the *Portuguese* and *Dutch* use it for a Dysentery.

Fuligo, Soot. This is so well known, that it requires no Description. The Soot of Vegetables, upon a chymical Analysis yields a large Quantity of transparent Water, a yellow volatile Salt, and a thick black Oil. By considering the Analysis of Soot, we may learn what Parts of Vegetables are volatile, and what not, and be convinc'd that even Earth which appears so fix'd in the most violent Fire, after being separated from the other Principles, yet when mix'd with the rest, is either by the Force of Flame or Fire thrown to a great Distance thro' the Air, in the Form of a thin Cloud. Pills compos'd of dry Soot, and gild-ed, are recommended for the Cure of cold Distempers. The volatile Salt of Soot is used with the same Success as that of Animals. *Hartman* recommends the Salt which rises last for giving Relief in Cancers; But the Soot produc'd by Oak-wood alone, the common *Dutch* Tufts, or common Pit-coal, appear different,

upon a chymical Analysis; and that again, would be very different, which should be collected from the Chimney of a public Kitchen, which is continually fill'd with the Fumes, not only of the Fewel, but also of all Kinds of boil'd, roasted, and fry'd Aliments.

Fumaria, Offic. *Fumaria purpurea*, Ger. *Fumaria Officinarum* & *Dioscoridis*, C. B. Fumitory. It grows in Fields and cultivated Grounds, the whole Plant is used. It is good against splenetic and hepatic Disorders, it attenuates and expells serous, bilious, and adust Humours, it constricts the Viscera; and when so constricted, corroborates them and purifies the Blood, in consequence whereof it is specifically good in the Scurvy, and all Disorders of the Spleen and Mesentery, in a Jaundice, the Itch and all Disorders of the like Nature. The distilled Water dropt into the Eyes, is said to cure Dimness of Sight.

Fumaria lutea, C. B. Pin. *Fumaria lutea montana*, M. H. *Fumaria quæ Split Dicitur*. J. B. Yellow Fumitory. It is gather'd on the Mountains of *Bosnia*, in a strong Soil. It is of Service in all cold Affections of the Nerves, comforts the Brain, gently purges, provokes Urine, and opens Obstructions of the Mesentery and Liver.

Fumaria bulbosa, Offic. Schrod. *Fumaria radice cava major*, C. B. P. Tourn. Inst. The hollow Root. This is cultivated in Gardens and flowers in *April*. The Heart is used, and is heating, drying, abstergent, subastringent and aperient. It is hepatic, uterine, alexipharmic, sudorific, diuretic and vulnerary. It is principally used in exciting a Discharge of the Menfes and Lochia. It expels the dead Fœtus, cures the Jaundice; cleanses the Blood, and consequently carries off the Itch. Externally it is recommended for cleansing and consolidating old and fistulous Wounds. It is recommend-

ed for removing arthritic Pains arising from a cold Cause, for resolving coagulated Blood in Contusions, and for curing a Putrefaction of the Mouth. Some of the Shops fraudulently use this instead of the *Aristolochia rotunda*.

Fungus, Offic. *Fungus esculentus*, Park. *Fungus Pileolo lato & rotundo*, C. B. Toura. Inf. The Mushroom, or Champignon. This grows in barren pasture Grounds and is found in the Autumn. The whole Plant preserv'd in Vinegar is used in Kitchens, but rarely or never found in the Shops.

Fungus ovatus, Park. *Fungus rotundus orbicularis*, C. B. Puff-balls, Bull-fists, Molly-puffs. This is found almost every where in pasture Grounds in the Autumn. The whole Plant is used, and as it is of a drying and astringent Nature, when sprinkled in recent Wounds it stops the Hæmorrhage, dries inveterate Ulcers, and stops the hemorrhoidal Discharge; but it is thought prejudicial to the Eyes.

Fungus maximus rotundus pulverulentus, J. B. *Lycoperdon alpinum maximum Cortice lacero*, Great Dusty Mushroom. This is found in fat pasture Grounds, and near Dung-hills. The whole Plant, which is sometimes as large as a Man's-head, is used for checking dangerous Hæmorrhages, for which Purpose the Barbers use it in many Parts of Germany.

Fungus Phalloides, J. B. *Phalloides*, Offic. *Fungus virilis penis Effigie*, Ger. Emac. This Species of *Fungus*, according to some is of singular Service in intolerable arthritic Pains, and the Country People in Saxony, apply it externally in all Pains of the Joints.

Fungus typhoides coccineus, Offic. *Fungus typhoides coccineus Melitenfis*, Raii Hist. Scarlet Mushroom. It is found on a Rock near the Isle of

Malta, and is esteem'd a very great Astringent. The Quantity of a Scruple, or a little more is given in Wine, or Broth, or any other Vehicle, in Order to stop Hæmorrhages.

Galanga major, Offic. Ger. Emac. Park. Theat. Great Galangal. It grows spontaneously in Java and Malabar, and is from thence brought to Europe. The Root, is the Part used in Medicine, which is good in all Disorders of the Stomach, Head, and Uterus; it incides and opens; hence it is good in all Crudities and Inflammations of the Stomach, a Vertigo, and all other Diseases, proceeding from cold and flatulent Causes.

Galanga minor, Offic. J. B. C. B. Pin. Common Galangal. It grows common in China, and is from thence transported to us. It has the same Virtues ascrib'd to it as the former, tho' this is the most esteem'd. It expels Wind, provokes Urine and the Menfes, and helps Digestion; it abounds with a volatile oleous Salt, immersed in mild viscid Parts.

Galbanum. This is the Juice, or Gum of the *Ferula*, a Plant growing in Syria, and by some, according to *Dioscorides*, call'd *Metopium*. The best, is what resembles Frankincense, is grumous, pure, pinguius, free from Chips, retaining some of the Seeds, and of the Plant, of a strong Smell, not very moist, nor yet quite dry. This Gum is of an heating, drawing, and discutient Quality. When used by Way of Pessary, or for a Suffumigation, it provokes the Menfes, and expels the Fœtus; drank in Wine, with Myrrh, it resists Poison, and expels the Fœtus, when dead. It is applied in Pains of the Sides, as also to Boils. The Smell of it raises those who labour under an Epilepsy, or hysteric Fits. When burnt, its Smoke drives away venomous Animals.

mals. This Gum, when rubb'd on the Body, preserves it from the Bites of Serpents. A little of it put into the Cavity of a putrid Tooth, alleviates the Tooth-ach. It is an excellent antihysterick, emmenagogue, and forcing Medicine. When applied by Way of Plaster to the Navel, it is said to cure hysterick Convulsions. It is sudorific, when taken internally, and when externally applied, softens and digests Tumors, and brings them to a Suppuration. For internal Use, it ought to be strain'd, but not for external. It is an Ingredient, in the Species *scordio sine Opio*; *Pilula Gummosæ*; *Confectio Paulina*; *Mithridatium*; *Theriaca Andromachi*; *Emplastrum commune cum Gummi*; & *Cataplasma maturans*, of the last London Dispensary.

Galega, Ruta capraria, Offic. *Galega vulgaris floribus cæruleis*, Tourn. Inf. Boerh. Ind. Alt. Goats Rue. It grows by River Sides, and marshy Places, in several Parts of Italy, but with us only in Gardens; it flowers in June and July. It is a most celebrated Alexipharmick and Sudorific, and most powerfully discusses pestilential Poison; its principal Use is in expelling petechial Eruptions, and other pestilential Diseases, and in curing the Plague itself; it is good in the Measles, and Epilepsies of Children, and the Stings of Serpents, and destroys Worms, even by external Application.

Galeopsis, Offic. *Galeopsis procerior fœtida spicata*, Tourn. Inf. *Galeopsis five Urtica iners magna fœtidissima*, J. B. Hedge Nettle. It grows by Hedges, and flowers in July and August. The Leaves and Seeds are used, which dissipate all Hardnesses, Cancers, Kings Evil, Pains, and Parotides; it is highly commended against Putrefaction, Gangrenes, and

phagedenic Ulcers. It is the best Plant in the World for uterine Suffocations, according to Boerhaave.

Galeopsis Augustifolia fœtida, J. B. *Galeopsis palustris, folio Betonica, flore variegato*, Boerh. Ind. Alt. *Panax Coloni*. Offic. Clowns all Heal. It grows near Rivers, and in watry Places, and flowers in July. The Herb, is a most celebrated Vulnerary, beaten into a Cataplasim, with Hogs Lard; it likewise stops all Hemorrhages; and *Cæsalpinus* affirms, that it cures tertian Agues.

Gallium, Offic. *Gallium luteum*, Boerh. Ind. Alt. *Gallion verum*, J. B. Cheese Rening. It grows in dry Places, and flowers in June and July. The Herb is used, which whole or in Powder, stops Hæmorrhages and Fluxes of Blood, which it effects, by its coagulating and incrasating Quality; the Decoction of the Herb, is esteem'd good for the Gout, and in a Bath, it removes Weariness. It coagulates and stops Fluxes, and is a Soporific.

Gambogium. See *Gutta Gamba*.

Genista juncea, Boerh. Ind. Alt. *Genista Hispanica*, Offic. *Spartium arborescens seminibus lenti similibus*, C. B. Pin. Spanish Broom. It is common in Gardens, and flowers in June and July. The Branches, Flowers, and Seeds are used; it is more efficacious than the common *Genista*, being a potent Expeller of pituitous and ferous Humours, both by Vomit and Stool; it is effectual in Dropsies, the Sciatica, and Gout, provokes Urine, and breaks the Stone in the Kidneys; the Oil of the Flowers discusses Tumors of the Spleen, by anointing the Part with it; the Flowers used with Honey of Roses, or an Egg, dissolve stumorous Swellings. The Flowers and Seeds, work most violently by Vomit, not unlike Hellebore, but with Safety. The Juice

of the Branches macerated in Water, and then bruised, are efficacious in the Sciatica and Quinsey.

Genista tinctoria Germanica, C. B. Pin. Tourn. Inst. Boerh. Ind. Alt. Green Weed, Dyers Weed. This is too frequent in Pasture Grounds, and flowers in June and July. The Herb is used, and has an astringent Virtue ascrib'd to it. It agrees in Temperament and outward Appearance with the common *Cytiso-Genista*, and may be supposed to have the same Qualities.

Genista-Spartium, majus, brevioribus, aculeis, Tourn. Inst. Boerh. Ind. Alt. The Lesser Furz. This flowers in Autumn, and the whole Plant is used, which agrees in Virtues with the preceding.

Genista Spartium, majus, longioribus, aculeis, Tourn. Inst. Boerh. Ind. Alt. Furz or Gors. This Plant flowers in the Spring, and the Whole of it is used in Medicine, for the same Purposes as the two preceding.

Gentiana, Offic. *Gentiana major*, Ger. *Gentiana major lutea*, Tourn. Inst. Boerh. Ind. Alt. Gentian. This is cultivated in the Gardens of the Curious, and flowers in June. The Root is so well known that it requires no Description. It is alexipharmic, aperient and attenuating, and is principally used in the Plague, malignant Disorders, and Obstructions of the Liver and Spleen. It is esteem'd a good Stomachic. From this the College direct an Extract to be made; and it is an Ingredient in the *Infusum Amarum simplex*; the *Infusum Amarum purgans*, the *Vinum Amarum*; the *Tinctura Amara*; the *Species e Scordio sine Opio*, *Mithridate*; and the *Venice Treacle*.

Gentiana cruciata, Offic. C. B. Pin. Tourn. Inst. *Gentiana minor cruciata*, Park. Parad. Cross-wort Gentian. This grows in uncultivated Places and Gardens, flowering in July and August

The Root is accounted stomachic, febrifuge, and excellent against the Plague, and the Bites of venomous Animals. As both the Leaves and Root are bitter, it is probable, they will produce the same Effects with other Bitters.

Gentiana angustifolia autumnalis major, Tourn. Inst. Boerh. Ind. A. Marsh Gentian. This grows in moist Thickets, and flowers in Autumn. The Herb itself is used, and is by later Physicians thought effectual against pestilential Disorders, and the Bites or Stings of venomous Animals. Others highly extol it in Disorders of the Lungs and Liver. In Virtues it agrees with the common Gentian, but is much weaker.

Gentianella verna, Offic. *Gentianella verna major*, Raii Hist. *Gentiana alpina magno flore*, Boerh. Ind. Alt. Gentianel. This grows spontaneously on the Tops of the Alps, is frequently cultivated in Gardens, and flourishes in April and May. The whole Herb is used, and upon Account of its intense Bitterness is recommended in a Jaundice and Obstructions of the Liver.

Gentianella autumnalis, Offic. *Gentiana pratensis, flore lanuginoso*, C. B. Pin. Tourn. Inst. Bastard Gentian. This grows in mountainous, chalky, and dry pasture Grounds, flowering in September. It is thought to agree in Virtues with the common Gentian. It is an excellent stomachic, a grateful Bitter, and far superious to the lesser Centaury, in whose stead the Physicians and Apothecaries of London frequently use it.

Geranium Batrachioides, Offic. Ger. *Geranium Batrachioides, Gratia Dei Germanorum*, C. B. Pin. Boerh. Ind. Alt. Crow-foot Cranes-bill. This grows in moist Meadows and pasture Grounds, flowering in June and July. The Powder of the dried Herb, laid upon a Wound not only

only forthwith stops the Hemorrhage, but also surprisngly and suddenly consolidates it.

Geranium Columbinum, *Pes Columbinus*, Offic. *Geranium Columbinum*, Raii Hist. Doves-foot. This grows by the Sides of Hedges, and flowers in *June*. The Herb itself is used, being accounted an excellent Vulnerary.

Geranium moschatum, Offic. Raii Hist. *Geranium cicutæ folio moschatum*, Tourn. Inst. Musk'd Cranes-bill. This Herb grows sometimes tho' rarely in the Fields; but is frequently to be met with in Gardens, flowering in *June*. The Herb is used and accounted a remarkably good Vulnerary.

Geranium Robertianum, *Gratia Dei*, Offic. *Geranium Robertianum*, Raii Hist. Boerh. Ind. Alt. Herb Robert. This is every where to be found in Hedges, and flowers in *May*. The Herb is used, and is moderately dryin^g, astringent, and detergent. It also resolves coagulated Blood, and is beneficial to Wounds, for which it is used in vulnerary Potions, and applied externally.

Geranium Sanguinarium, Offic. Ger. *Geranium sanguineum maximo flore*, C. B. Pin. Tourn. Inst. Bloody-Cranes-bill. This grows in Thickets and Groves, especially of the mountainous Kind, flowering in *July*. The Herb itself is used, and when exhibited in whatever Manner, is said to stop Hæmorrhages of all Kinds.

Geranium Tuberosum, Offic. Ger. Raii Hist. *Geranium Tuberosum Majus*, C. B. Pin. Knotted rooted Cranes-Bill. This is cultivated in the Gardens of the Curious; and flowers in *June* and *July*. The Root is used, which when drank in Wine, is said to discuss Inflammations of the Pudenda.

Gingidium, Offic. *Gingidium facinuli folio*, C. B. Pin. *Thapsia orientalis*, *Anethi folio*, *semine eleganter cre-*

nato, Tourn. Inst. Boerh. Ind. Alt. Oriental Pick-tooth. This is found in the *East-Indies*, and flowers in the Summer. The Leaves are used, and it is said, that a Decoction of them in Wine, when drank, proves beneficial in Disorders of the Bladder. The Plant itself, when eaten, either crude or boil'd, is accounted highly serviceable to the Stomach,

Ginseng & *Ninzin*, Offic. *Ginseng* & *Genfing Quibusdam*, Raii Hist. *Aureliana Canadensis Iroquæis Garrentogon*, *Sinensibus Ginseng*, R. P. Lafiteau. The Root of this Plant is white, somewhat knotty, about thrice the Thickness of the Stem, and which goes tapering to the End; a few Inches from the Head, it frequently parts into two Branches, which gives it some Resemblance to a Man, whose Thighs the Branches represent. This Plant bears a Kind of reddish Berries, which grow in a circular Cluster, but are not good to eat. It dies away every Year, and the Number of its Years may be known from that of the Stalks it has shot forth, of which there always remain some Marks. This Plant is found between the thirty-ninth and forty-seventh Degree of Northern Latitude, and between the tenth and twentieth Degree of Eastern Longitude, reckoning from the Meridian of *Peking*. There is here a long Tract of Mountains almost inaccessible, on Account of the thick Forests which cover and encompass them. The Ginseng is found on the Declivities of these Mountains and in the Forests amidst a thousand other Plants. This Circumstance, renders it highly probable, that if it is to be met with any where, it may be found in *Canada*, where the Forests and Mountains exactly resemble those now mention'd. Accordingly, Father *Lafitau*, induc'd by a Letter, from Father *Jartoux* in *China*, concerning the Ginseng, sought for it in the Forests of *Ca-*

nada, and believ'd he had found it, because it was exactly like what Father *Jartoux* had describ'd. The *Englisb*, also, discover'd this Plant in *Maryland*. But notwithstanding its Scarceness every where, we have some Reason to comfort ourselves for the Want of it, since as Mr. *Re-neume* in *Hist. de l'Acad. Royale*, assures us, the *Hepatica Nobilis Tragi*, a common Plant in Medicine, but less esteem'd than it deserves, is endued with all its principal Virtues. The most eminent Physicians in *China*, have wrote whole Volumes upon the Virtues and Qualities of this Plant, and make it an Ingredient in almost all the Medicines they prescribe for the Nobility, since it is too dear for the common People. They affirm, that it is a sovereign Remedy for all Weaknesses, occasion'd by excessive Fatigues, either of Body or Mind; that it dissolves pituitous Humours; that it cures Weakness of the Lungs and the Pleurisy; that it corroborates the Stomach, and helps the Appetite; that it dispels Fumes and Vapours; that it fortifies the Breast, and is a Remedy for Shortness of Breath; that it strengthens the vital Spirits and increases Lymph in the Blood; that it is good against Vertigos and Dimness of Sight, and that it prolongs Life to extreme old Age. It is impossible, that the *Chinese* and *Tartars* should set so high a Value upon this Root, if it did not produce the most salutary and happy Effects. Those who are in Health, often use it in Order to render themselves more vigorous and strong. It is certain that it subtilizes, increases the Motion of, and warms the Blood; that it helps Digestion, and invigorates in a very sensible Manner. The green Leaves when chew'd, also remove Weariness in a very remarkable Manner. The Root of this Plant is to be boil'd, in Order to extract its Virtues, as is practis'd

by the *Chinese*, when they give it to sick Persons, on which Occasion they seldom use more, than the fifth Part of an Ounce of the dried Root. But as for those who are in Health, and only take it for Prevention or some slight Indisposition. Father *Jartoux* advises them not to make less than ten Doses of an Ounce, and not to use it every Day. The Root is to be cut into thin Slices, and put into an earthen Pot well glaz'd, and fill'd with about a Pint of Water. The Pot must be well cover'd, and set to boil over a gentle Fire, and when the Water is consum'd to the Quantity of a Cupful, a little Sugar is to be mix'd with it, and it is to be drank off immediately. After this, as much more Water is to be put into the Pot, upon the Remainder, and to be boil'd as before, in Order to extract the whole Juice and spirituous Parts from the Root. One of these Doses is to be taken in the Morning, and the other at Night.

Gladiolus, Offic. *Gladiolus floribus uno Versu dispositis major, floris colore purpureo rubente*. C. B. Pin. Boerh. Ind. Alt. Corn Flag. It is cultivated in our Gardens, and flowers in *June*. The Root which is the Part used is of an attracting, discutient, and drying Quality. It is commended as an Alexipharmic, and against the Pestilence. It is accounted by the ignorant and superstitious Vulgar a Charm against Witchcraft, and a Spell to render the Body invulnerable.

Glans unguentaria, C. B. Raii Hist. *Nux unguentaria*, J. B. *Nux Ben sive Glans unguentaria*, Park. Theat. The Ben Nut, Nephritic Wood. This grows in both the *Indies*. The Fruit is used. The Wood, which is of a darkish Colour, solid, hard, and heavy, is in the Shops, call'd Nephritic Wood. The Nuts are heating, drying, detergent, emetic, and purgative. They, also, evacuate Bile and Phlegm, and cure the

the Itch and Impetigo. The Oil of *Ben* is extracted from the Kernels, and imported to us from *Italy*. The Wood is heating and drying. It is principally recommended for Disorders of the Kidneys, and difficult Discharges of Urine, and may be accounted proper in Obstructions of the Liver and Spleen.

Glastrum, Offic. *Isatis sativa vel latifolia*, C. B. Pin. Tourn. Inst. *Glastrum sativum*, Ger. Woad. This is sown in the Fields, and flowers in *June*. The Herb is used, being of a drying and astringent Nature. It is an excellent Vulnerary, conglutinates Wounds, and stops Hæmorrhages, and immoderate Discharges of the Menfes.

Glaucium flore luteo, Tourn. Inst. Boerh. Ind. Alt. *Papaver Corniculatum*, Offic. Yellow horned Poppy. *Dioscorides* says, this Plant is diuretic, and *Galen* looks upon it to be vulnerary and deterfive, without considering that it must only be used to eat away the fungous Flesh of Ulcers. Nevertheless, they give an Infusion of Half an Handful of it in White-wine, to those who are subject to the Stone. In *Provence*, they use the same Leaves bruised, for Ulcers, and especially for the Wounds of Horses.

Glaucium, Offic. *Argemone Mexicana*, Tourn. Inst. Boerh. Ind. Alt. *Papaver Spinosum*, Raii Hist. Purging Thistle. This is cultivated in the Gardens of Botanists, and flowers in *July* and *August*. The Juice, which bears the Name of *Glaucium*, is the Part used; and being, as *Dioscorides* says, of a refrigerating Quality, is beneficial in recent Disorders of the Eyes. *Dale* and *Bauhine* think, that the *Glaucium*, is the Juice expressed from the last-mentioned Plant, being induc'd thereto by the Description *Dioscorides* gives of it.

Glaux, Offic. *Glaux*, *Dioscoridis*,

Glaux Hispanica, J. B. The Milk-Wort of *Dioscorides*. This grows in hilly and chalky Grounds, flowering in *June*. The Herb is used, which, according to *Dioscorides*, when boil'd in Barley-Water, is effectual for restoring Milk in Women's Breasts, when it is lost. There is a Dispute among Botanists, about the *Glaux* of *Dioscorides*, some taking it for one, and others for another Plant.

Glaux vulgaris, Offic. *Astragalus luteus perennis procumbens vulgaris seu Sylvestris*, Raii Synop. Tourn. Inst. Liquorice-vetch. This grows in Bushes, and on the Borders of Fields, flowering in *July*. The Herb is sometimes fraudulently sold in the Shops for *Galega*. The Root is sweetish, astringent, and gives a deep Tincture of Red to the blue Paper. The Leaves, hardly give it any, but are bitter, and smell like those of Elder, which shews that the fetid Oil is found in greater Quantity in the Leaves, and that involves the acrid Salt and Earth. This Plant is not much in Use, tho' an Infusion of it in Wine is given with Success for a Retention of Urine, and the Gravel, by some Botanists at *Paris*.

Globularia vulgaris, Tourn. Inst. Boerh. Ind. Alt. *Globularia*, Offic. *Bellis cerulea Monspeliaca*, Ger. French Daisy. This is found in the Gardens of the Curious, flowering in Summer. The Herb itself is used, and is of a vulnerary Nature.

Glycirrhiza Siliquosa vel Germanica, C. B. Pin. Boerh. Ind. Alt. *Glycirrhiza*, *Liquoritia*, Offic. Liquorice. This is so well known that it requires no Description. The Roots, which are the only Parts used, are pectoral, and of great Use in Disorders of the Lungs, as Coughs, and Shortness of Breathing. They, also, mitigate the acrimonious Particles which cause Soreness in the *Astera Arteria*, and

Hoarseness. They are, also, good in nephritic Disorders, as the Stone, Gravel, Heat and Retention of Urine, and Ulcers in the Kidneys. There are two Kinds of the inspissated Juice sold in the Shops, one made in England, and prepared of the Decoction of the Roots, mix'd with the Pulp of Prunes, and made up into Balls; the other is imported from Spain, being made near Tortosa in Catalonia, and brought to us in beautiful, shining, brittle Lumps, wrapp'd up in Bay Leaves. It is a good Emollient and Healer, and fit for promoting Expectoration, because the viscid Parts which it contains, sheath and blunt the acrid Salts. It is to be used in small Quantities, and often repeated, otherwise it proves disagreeable to the Taste. *Tragus* prefers the Root and its Juice before Sugar. Every one, says he, knows, that bitter Things and Sugar excite Thirst, which this sweet Root and its Juice extinguish. The Bark, according to *Dodonæus*, has something of a Bitterness, and is of an hotter Quality than the other Parts, and therefore ought to be scrap'd off. But *Casper Hoffman* says, we are not to regard this Direction, because the Bitterness gives it an absterfive Quality. Liquorice boil'd in Water with a little Cinnamon is by some used for their ordinary Drink, and after Fermentation intoxicates no less than Beer. This is an Ingredient in the *Decoctum pectorale*; the *Aqua Calcis minus Composita*; the *Aqua Calcis magis Composita*; the *Syrupus Pectoralis*; the *Pulvis e Tragacantha Compositus*; the *Trochisci Bechici Albi & Nigri*; the *Elixarium Lenitivum*, and *Venice Treacle*.

Gnaphalium Alpinum, Ger. *Gnaphalium Alpinum pulchrum*, Raii Hist. *Leontopodium*, Offic. Lion's Foot. This grows in mountainous Places, and flowers in July. The Root is

said to discuss Tubercles; and the Herb when boil'd, and bruised with Oil is by Country People effectually applied for removing hard Marks, Contusions, and the Effects of Blows.

Gnaphalium maritimum, C. B. Pin. *Gnaphalium marinum seu Cotonaria*. Park. Sea-Cudweed, or Cotton-Weed. This Plant is deterfive, desiccative, and very restraining.

Gossypium sive Xylon, Ger. *Bombax*, Offic. *Xylon sive Gossypium herbaceum*, Raii Hist. Boerh. Ind. Cotton-Bush. This grows in the Island of Malta, and several other Countries. The Seeds which are black and round are used, and thought beneficial in Disorders of the Lungs, Coughs and Asthmas. They are, also, believ'd to augment the Quantity of the Semen.

Gramen Arundinaceum, Offic. *Gramen Dumetorum panicula acetosa*, *Semine pappiso*, Raii Hist. Reed-Grass. This grows in moist woody Places. The Root is used, and its Virtues agrees with the common Reed.

Gramen Caninum, Ger. *Gramen Caninum arvense*, seu *Gramen Dioscoridis*, C. B. Pin. Quick-Grass. This grows in the Fields, and is cultivated in Gardens. Its Root, which is the only Part used, is of a refrigerating, drying, aperient, subastringent, and penetrating Quality. This is the celebrated *Chien-dent* of the French, which they constantly use as an Ingredient in all their Ptifans. The Root is cold and dry, but the Herb refrigerates, though weakly, and is in a middle State between Humidity and Dryness. The Root is possess'd of a pungent Quality, consists of subtile Parts, and has often been found effectual for dissolving the Stone. It is, also, moderately aperient and lenitive, and removes Obstructions of the Viscera, without producing any bad Consequences. By a Chymical Analysis,

a great deal of Oil, Earth, and several acid Liquors, as, also, a little fix'd but no volatile Salt is obtain'd from this Root, so that, probably, it acts by a Salt analagous to that of Coral involv'd in a large Quantity of Sulphur.

Græmen Dactylon, Offic. *Dactylon folio Arundinaceo majus*, C. B. Pin. Cock-foot Grass. This grows in Fields, Vineyards, and sandy Places. Its Root is used, and its Virtues are nearly the same with those of the Quick Grass.

Græmen Leucanthemum, Offic. *Alfne pratensis gramineo folio ampliore*, Tourn. Inst. Stitch-wort. This is every where found in Woods, Thickets, and Hedges, flowering in the Spring. The Herb is used, and is of a refrigerating and drying Quality. It is, also, said to be beneficial in Inflammations of the Eyes.

Græmen Mannæ, Offic. *Græmen Mannæ esculentum*, Ger. Manna Grass, Russia Seed. This grows in Germany and Poland. The only Parts in Use are the Seeds, which are small, oblong, pellucid, white, of a faint Taste, and when decorticated, not unlike Rice. The Seeds are possessed of the same Qualities with Rice, are moderately astringent, resolve hard Tumors of the Breast, and when used as Aliments are moderately nutritive. They are, also, said to be highly efficacious for the Cure of Rickets in Children.

Græmen Parnassii, Ger. Emac. Raii Hist. *Parnassia palustris & vulgaris*, Tourn. Inst. Boerh. Ind. Alt. Grass of Parnassus. This grows in marshy and putrid Soils, flowering in August. The Root, Herb and Seeds, are used. The Juice of the Leaves, and a Decoction of the Roots are accounted excellent Medicines for Disorders of the Eyes. The Seeds are extremely diuretic, and stop Vomiting and Diarrhæas.

Grana Tiglia & Lignum Moluccense,

Offic. *Palma Christi Indica*, Tourn. Mat. Med. Purging Nuts. This is the Fruit of a Tree cultivated in Malabar and elsewhere, whose Wood is spongiuous, light, rare, pale, cover'd with a cineritious Bark, of an acrid, hot, and nauseous Taste, but without any Smell. The Fruit is oblong, oval, gibbous in one Part, and depressed in another, of a blackish Colour, and of an acrid, hot and nauseous Taste. Both the Fruit and Wood heat, incide, and attenuate, but as they are of too caustic a Quality they are rarely found in the Shops.

Granata malus, Mont. Ind. *Malus Punica*, Raii Hist. *Punica quæ malum Granatum fert*, Tourn. Inst. Boerh. Ind. Alt. The Pomegranate-tree. This grows spontaneously in hot Countries, and flowers in May, The Flowers, Fruit, Bark of the Fruit, and Seeds are used. The Fruit is good for the Stomach, but yields very little Nourishment; they are acid, cold, astringent, and stomachic, and are chiefly used in bilious Fevers, a Gonorrhæa, depraved Appetite of pregnant Women, correcting Putrefaction in the Mouth and the like. The Flowers are of the same Nature as Balaustines. The Bark which in the Shops is call'd *Malicorium*; has the same Virtues as the Flowers, especially in stopping Fluxes of the Hæmorrhoids, Nostrils, and Uterus; the Seeds are refrigerating and astringent.

Gratiola, Offic. Ger. Emac. *Gratiola vulgaris*, Park. Theat. *Digitalis minima*, *Gratiola diæta*, Boerh. Ind. Alt. Hedge-hyssop. This is cultivated in Gardens, and flowers in July. The Herb is us'd and accounted a Specific for evacuating aqueous, viscid and bilious Humours, for which Reason it is much us'd in the Dropsy and Jaundice. It is also said to kill Worms.

Grossularia Spinosa sativa, C. B. Pin.

Pin. Grossularia, Uva crissa, Offic. *Grossularia*, Park. Theat. The Gooseberry Bush. It grows in Gardens, flowers in *April*, and produces its ripe Fruit in *July*. The Fruit is us'd. The unripe Berries are good for the depraved Appetite of pregnant Women. They procure Appetite, and stop all Fluxes of the Belly. The Berries boil'd in proper Liquors are advantageously exhibited to feverish Patients. The ripe Fruit is esteem'd good for the Stomach.

Guaiacum, Offic. Ger. Emac. Raii Hist. *Guaiacum, sive Lignum Sanctum*, Park. Theat. *Guaiacum magna Matrice*, C. B. *Fruetus Guaiaci putatus & folia*, J. B. *Guaiacum*, or Pock-wood. There are two Species of Wood adapted to the Cure of the venereal Disease; one of them solid, dense, resinous, blackish, consisting of variously complicated Fibres, of an acrimonious, bitterish aromatic Taste, and of a fragrant Smell. This the *Americans* call *Hiacan*, or *Huiacan*, whence comes the European Name *Guaiacum*. The other very much resembles this in Denfeness, Complication of Fibres, Taste and Smell, but is of a more whitish or rather yellowish Colour. This the Natives call *Hoaxecan*, and we *Lignum sanctum*, on Account of its extraordinary Virtues. The Bark of both is ligneous, thin, hard, of an acrimonious and bitterish Taste, but almost entirely void of Smell. Both these Species are now common in the Leeward Islands, and all that Part of *America*, which lies under the Torrid Zone. The antient Method of preparing the Decoction of *Guaiacum* was to take a Pound or twelve Ounces, of the thin Chips or Raspings of the Wood, and infuse them in eight, ten, or twelve Pints of Water, for four-and-twenty Hours, in a new earthen Pot. Then the Vessel being well stopp'd, they boil'd it by setting the Pot in a Furnace

full of Water, to the Consumption of a fourth or third Part, or even of an Half, as they thought most agreeable to the Strength and Temperament of the Patient, or the Violence of the Disease. Then they strain'd the Decoction, and letting it cool, bottled it up for Use. To the Wood left in the Pot they pour'd the same Quantity of Water as before, and boil'd it over a gentle Fire, to the Consumption of a fourth Part, then strain'd it and set it aside. This second Decoction was bottl'd for ordinary Drink. When these Decoctions were got ready, the Patient being prepar'd by some gentle Cathartic, and a spare Diet, for some Days, was closely confin'd to his Chamber, which was kept very warm, and well secur'd against the Air and Cold. The Patient lying in Bed, took every Morning, very early, a Glass which held eight or ten Ounces of the first Decoction warm. Then covering himself well up with the Bedcloths, he compos'd himself to sweat for two or three Hours. Then the Sweat being absterg'd, and the Body dried, four Hours, at least, after taking the Decoction, he had two or three Ounces of Biscuit, with a few Raisins, Almonds, or Pistaches offer'd him to eat, and he was order'd to drink plentifully of the second Decoction. Four Hours after he took eight or ten Ounces of the first Decoction, sweated three Hours as before, and after wiping his Body, was allowed to eat two or three Ounces of Biscuit, with some Raisins, Almonds, or Pistaches, and to drink some Cups full of the second Decoction. But if the Patient was then extenuated, or of a weakly tender Constitution, and unlikely to support so great Abstinence, a larger Quantity of Raisins and Biscuit was allow'd, or even some Chicken-Broth. Some Days after, perhaps, he had Half or a Quarter of a small Chicken

Chicken roasted or boil'd in pure Water, without Salt, allow'd him. In this Method they persisted for fifteen Days, in which Time, if the Patient was costive, an emollient Clyster was injected every second or third Day. After the first fifteen Days, the Patient was purg'd with some gentle Cathartic, as the Pulp of Cassia, Manna, Tamarinds, and the like; and on such Occasions he drank nothing but the second Decoction for that Day. When this was over, he enter'd upon the same Course of Medicine as before, till the thirtieth or fortieth Day; but had a little larger Quantity of Food gradually allow'd him; and, after the twenty-fifth or thirtieth Day, if his Strength was sufficient, he was permitted now-and-then to get out of Bed; and being well cloth'd, to take a Turn or two about the Chamber, provided he was free from the least Sweating. Towards the End of the Cure he was again purg'd, and after that, he had the Liberty of walking out of his Chamber, not indeed into the open Air, but into another Room, till he was able to bear the Air. They were also very cautious with Respect to sudden Changes, since they requir'd a Month longer to bring the Patient by Degrees to his usual Method of living, during which he observ'd a proper Regimen, abstain'd from Wine, and us'd the second Decoction for his ordinary Drink. By this Method the strong Decoction of the *Guaiacum*, entering into the Laſteals, exhausted, by Abstinence, and pervading all the Parts of the Body, dissolved, attenuated and freed the Globules of Blood and Lymph, which were harden'd and insipiated by the Contagion, and either altered or corrected the obvious contaminated Fluids, or expell'd and eliminated them by Urine or Sweat. The Viscera, also, in all their Parts, and Vessels, being for forty Days ma-

cerated in this acrimonious Lixivium, had all their Obstructions and Infractions insensibly remov'd, so that the Virulence of the venereal Contagion being subdu'd, and eliminated, the Patients were restor'd to their former Health. Of the Truth of this *Utric Hutten* was a memorable Instance, who for many Years, labouring under the venereal Disease, attended with severe Pains, numerous Exostoses, an ulcerous Caries of the Bones, an extreme Emaciation, and a dangerous Marasmus, underwent a Salivation eleven Times, to no manner of Purpose; but by the sole Use of the Decoction of *Guaiacum* for 30 Days together, was restor'd to perfect Health. The *Guaiacum* was at first thought to be innocent and safe; but in a short Time it was found from Experience, that by the Strictness of the Regimen, the Acrimony of the Decoction, and other concurring Symptoms, Persons of tender, hot, bilious Constitutions, those labouring under Disorders of the Lungs, Liver or Kidneys, and those dispos'd to Consumptions, were so exhausted and attenuated, as to fall into an incurable Phthisis. To avoid Misfortunes of this Nature, it was thought expedient to mitigate the Severity of the Regimen, and render the Decoction weaker, by which Means the Virtues of the Remedy were so far depress'd, that it was no longer effectual for the Cure of the Disease; so that *Guaiacum*, which was at first receiv'd with so much Applause, began to lose much of its Reputation, till the celebrated *Bernhaave* in his Preface to the Collection of Authors, on the venereal Disease, endeavour'd to revive its Use in the Cure of venereal Disorders, and gave it this great Encomium, that it will perform a Cure where a Salivation has fail'd, whereas if *Guaiacum* fails, it is in vain to try a Salivation. Besides, the Use of *Guaiacum* in venereal Cases, it is said

said in general, to be hot and drying, and therefore a great Promoter of insensible Perspiration, rather than of Sweat. On this Account it is reckon'd an excellent Sweetener and cleanser of the Blood, and therefore is much prescrib'd in cutaneous Disorders of all Kinds. On Account of its hot and penetrating Quality, it is also esteemed good in the Gout, by dissipating and insensibly wasting the Humours thrown upon the Joints; as also in Dropsies and Catarrhs, by drying up and consuming the superfluous Humidities. In a word, daily Experience evinces its Use in all Disorders arising from a Redundance. In making the Decoction of *Guaiacum*, it is to be observ'd, that the Rasplings of the fresh and green Wood are much better than those which are old and dry, and that the longer it is boil'd, the better it is. *Boerhaave* informs us, that if the Tincture of *Guaiacum* prepar'd with pure Alcohol, and inspissated to an Half, is mixed with four Times its Quantity of the Syrup of the five aperient Roots, and taken upon an empty Stomach, in the Morning, lying in Bed, it presently distributes itself over the whole Body, which it warms, promoting at the same Time a copious Sweat. And hence it is commended in the venereal Disease, when it has seiz'd upon the subcutaneous Parts. *Hoffman*, in *Observat. Phys. Chym.* informs us, that when a Decoction of *Guaiacum* is inspissated over a gentle Fire, there remains at the Bottom a resinous Substance, which is of a balsamic Nature, grateful Smell, and somewhat acrid Taste, and which when reduc'd to a Powder, and receiv'd into the Nostrils, by stimulating the glandulous Coats which cover the Bones of the Nostrils, so powerfully colliquates and evacuates the Phlegm lodg'd there, that from long Experience it appears preferable to all other Errhines; for, besides its stimulating Quality as an Errhine, it

is also possess'd of a corroborating Virtue, which is highly friendly to the nervous Parts of the Head. *Guaiacum* is of late much come into Practice in the Rheumatism. In the last *London Pharmacopœia*, an Extract, a Tincture, and a Balsam, are directed to be made of *Guaiacum*; and it is an Ingredient in the *Oleum Capiviæ compositum*, the *Aqua Calcis magis Composita*, and the *Pilule Aromatica*.

Guaiacum propemodum sine Matrice, C. B. P. *Lignum Sanctum*, Offic. *Palum Sanctum Indiciæ Occidui*, Park. Theat. Holy-wood. This is a firm compact Wood, somewhat whiter than the former and possess'd of the same Virtues. From these Trees is obtain'd the Gum *Guaiacum*, which is possess'd of the same Virtues with the Wood, but is accounted more efficacious. It is thought greatly to promote insensible Perspiration, and for that Reason to be good to remove such cutaneous Disorders as proceed from an Obstruction of the perspirable Matter in the miliar Glands. It is very warm and deterfive, and therefore good in Gleet, and all Exulcerations, whether internal or external. In Gonorrhœas it is by some deemed a Specific. It, also, frequently proves beneficial in the Gout, not only by deterging and cleansing the Joints and mucilaginous Glands from tartareous Matter, but also by warming and strengthening the Fibres, it enables them to move with such Vigour as to shake off, and prevent the Adhesion of such Particles to them.

Gummi, Gum. A concreted Vegetable Juice, which transudes thro' the Bark of certain Trees, and hardens upon the Surface. The Chymists only allow those to be properly Gums, which are dissolvable in Water; those which are only dissolvable in Spirit they call Resins; and those of a middle Nature, Gum Resins. *Geoffroy* says, that Gums are some-

something between Acid and Oil, being an acid Salt so fix'd in Earth, as that the greatest Part of it is changed to an Alkali, the other into Oil; so that the Mixture arising from thence is an oily Salt, resembling the saponaceous Concretes of the Chymists, made of Oil of Olives, and a Lixivium of Tartar, or the mucilaginous Bodies form'd of Spirit of Wine, and the volatile Spirit of Urine. And thus we see, that all Seeds which are oily when Ripe, are in the Beginning only a Mucilage, or imperfect Oil. In the antient Writers *Gummi* (κόμμι) put absolutely, imports Gum Arabic. *Gummi Ammoniacum*. Gum Ammoniac. *Pliny* tells us, that, in that Part of *Africa* which borders on *Ethiopia*, amongst the Sands, distills the Tear of Hammoniac, taking its Name from the Oracle of *Hammon*, near which grows the Tree call'd *Metopion*, whence it flows in manner of a Gum or Resin. There are two Kinds of this *Hammoniac*, one called *Thrauston* like Male Frankincence, and which is most valued; the other is fat and resinous and named *Phryma*. It is adulterated with Sand, as if it were contracted in its Growth; for which Reason, that which is in the smallest and purest Lumps bears the highest Price, which is forty Asses (about three Shillings) the Pound. This Gum is of an opening, cleansing and attenuating Nature, proper to clear the Lungs of viscid Phlegm, for which Reason it is greatly recommended in Asthmas, and Shortness of Breath. It is also good in nervous, hysteric and hypochondriac Disorders; externally used, it is suppurating, ripening and dissolving. It is proper for Hardness of the Spleen, Liver and Mesentery, good for opening Obstructions of the Menfes. This Gum contains Plenty of essential or volatile Oil, some Phlegm and Earth.

Gummi Anime. A Sort of Gum of which there are several Sorts taken Notice of by Authors, but that principally in Use is thus distinguish'd *Gummi Animi*, Offic. *Gummi seu Resina Anima*, Schrod. *Gummi Aminea*, Serap. *Minea*, Galeni. *Aminea*, *Myrrha*, Cæs. *Animum*, Amat. This Gum is brought to us from *America*, and flows from an Incision made in a Tree, of a moderate Bigness, the Leaves of which resemble those of the Myrtle. It contains a great deal of Oil and essential Salt, and is greatly recommended to soften and dissipate Cold, Painful, Rheumatic, flatulent Affections of the Head, Nerves and Joints. It is also good to strengthen the Brain, by applying it to the Top of the Head. The best Gum Anime is that which is of a white, Colour, dry, friable, clean, of a good Smell, and which soon consumes when thrown into the Fire.

Gummi Arabicum, Gum Arabic. This Gum is thought, by some to be the Gum of the *Acacia foliis Scorpioidis Leguminosa*. It is of a white Colour, inclining to yellow, pale and pellucid, of an insipid taste, and viscous; it exsudes spontaneously from an Incision made in the Tree. That is best which is pellucid like Glass, unmixed and in the Form of small Worms. It heats and moistens, inspissates, stops the Pores of the Skin, and blunts the Acrimony of Medicines. From its soft, glutinous Quality, it is serviceable against Coughs, Hoarseness, and Disorders of the Aspera Arteria, is a proper Ingredient in Applications to the Eyes and Arteries, and is of great Efficacy in the Dysuria, or Heat of Urine, and the Diabetes.

Gummi Bdellium. This is already taken Notice of under the Article of *Bdellium*.

Gummi Caranna. This is already taken Notice of under the Article of *Caranna*.

Gummi Ceraforum. This is mention'd under the Article of *Cerasus rubra*.

Gummi Copal. The Name of a Gum thus distinguish'd, *Resina Copal*, Offic. *Rhus Virginianum Lentisci foliis*, Raii Hist. This Gum is brought from the *Spanish West Indies*, being taken by our latest Authors for the Gum of Virginian Sumach. The Natives of *America* give the Name of *Copal* to all odoriferous Gums, which are transparent. The Gum we call by that Name is not much used in Physic, but is greatly used by the Varnishers, who dissolve it in *Oleum Spicae*, tho' it has sometimes been employ'd in Fumigations for violent Defluxions of the Head, and is still by some People recommended in the Palsy and other Weaknesses of the Nerves.

Gummi Elemi, See Elemi.

Gummi Guajaci, See Guajacum.

Gummi Hederæ, See Hederæ Arboresca.

Gummi Juniperi, See Juniperus.

Gummi Senegalense. This is already taken Notice of under *Acacia*.

Gummi Tacamahaca. Tacamahac. This is a resinous Substance, of which there are two Kinds, one in Shells, the other in Dumps. The first is the best, being sometimes called *Tacamahaca sublimis*. It is of a very agreeable Smell, resembling that of Lavender and Angelica. It is brought from *Madagascar* and *New Spain*, being the Product of a Tree called *Tacamahaca Populo similis, fructu colore Pæoniæ simili*, J. B. *Tecomahoi-ca*, Hernand. It is used externally in the same Intentions with the *Gummi Caranna*. It resolves Tumors, strengthens the Nerves, being spread upon Linen and put behind the Ears, it represses all Manner of Defluxions from the Head apply'd to the Temples, it is good for all Rheums of the Eyes and other Parts of the Face, and put into an hollow putrid Tooth, it

cures the Pain thereof. Being apply'd to the Nostrils, or burnt upon Coals, it gives immediate Relief in Hysterics. It is also recommended in arthritic Pains.

Gummi Tragacantha, Gum Tragacanth, or Gum Dragon, is a Gum which bursts forth from the *Tragacantha*, Offic. *Tragacantha Massiliensis*, J. B. Goats Thorn. It is brought to us from *Turkey* in Pieces of different Sizes. Externally used it is of Efficacy in the Dysentery; and dissolved in Milk or Rose-water, is good for the Redness, and acrimonious Rheums affecting the Eyes, and for Asperities of the Eye-lids. Dissolv'd in Water, its Mucilage is very convenient for the Formation of Troches, and other Forms of Medicines. It is moistening, lenient, emplastick, corrects Acrimony, and incrassates, Hence it is of Efficacy in Hoarsenesses, Spitting of Blood, Asperities of the Fauces, and the Strangury; four or six Grains of it exhibited in Milk or Water, are effectual in voiding of Blood by Urine.

Gutta Gamba. This is said to be produc'd from *Cambogium*, Offic. *Carcapuli*, Park. Theat. *Coddam Pulli, seu Ota-Pulli*, Hort. Mal. Gamboge. There are many Opinions concerning the Generation of this Gum: Some will have it to be natural, others factitious; some refer it to the *Esula*: *Bontius* to an Indian Plant, near a Kin to the *Esula*, others to the Flowers of the *Indian Ricinus*, and its Colour to the *Curcuma*; and some again endeavour to derive it from the *Tithymalus* and *Scammony*. We take it to be the concremented Juice of the Trees above-mention'd. *Boulduc* is of Opinion, that this ought to be esteem'd a resinous Juice, because it is inflammable, and will flow in the Fire, and be almost entirely dissolv'd in Spirits of Wine; but, on the contrary, in aqueous Menstruums, spreads itself

itself into a milky Substance like Scammony, and afterwards precipitates. The same Author endeavour'd to get Flowers from Gamboge, like those from *Benjamin*, but without Success. He made Trial on it with Spirit of Wine, a Lye of alkaline Salts, and Water: The Spirit of Wine dissolv'd all, except about a sixth Part; the Remainder, which the Spirit would not touch was easily dissolv'd by a Solution of Salt and Tartar. This, says he, may be esteem'd the saline Part of Gamboge; and tho' it had no purgative Virtue, was very Diuretic. The Resin, which was made by the Spirit of Wine, purg'd more violently, and with greater Irritation, than the Gamboge itself. This Gum was entirely dissolv'd by an equal Quantity of Salt of Tartar, and a sufficient one of boiling Water, excepting some few terrestrial Parts. The Liquor filtrated, and evaporated by a gentle Fire, gave a Sort of grey Salt, which easily flow'd in the Air, if not kept close stop'd in a Phial. This saline Extract purg'd with less Irritation, and in a smaller Dose, than the Gum; but caus'd a great Acrimony and Heat in the Throat, in so much that it was intolerable, and ought, therefore, to be enveloped in some other convenient Substance when it is given. This Gentleman observ'd before, that Water would not dissolve it, but only made it flow into a milky Substance of a yellow Colour, which soon precipitated, and left the Water clear above it. This Residue dry'd, differ'd in nothing from the Gum, only was more pure. By casting distill'd Vinegar on this milky Substance, it became clear; Oil of Vitriol, on the contrary, made it again turbid, and Spirit of Wine gave it a golden Colour. There are many ways, this Author observes, of correcting it, but he thinks that by alkaline Salts the best. However, he

gives one of his own, which, as it is different from any other hitherto used, he also continually practis'd with Success. The Manner is, by tying the Gum in a Rag, and putting it into a hot Loaf, as it comes out of the Oven, where it must remain for twenty-four Hours; afterwards it is to be powder'd, and this must be repeated four or five Times. By this Management, he says, he always found it freed from its great Violence, as well Purgative as Emetic. He farther observ'd the Crum of Loaves thus used to have both a purgative and emetic Quality. It purges very well in the Quantity of four Grains, but from six to eight Grains, it Purges and Vomits violently. It is reckon'd particularly serviceable in Dropfies, by evacuating the watery Parts of the Fluids; and, as it has no Taste, a very small Dose of it, such as a Grain or two, dissolved and mixed with Sugar is very fit for Children. It is worthy Observation, that tho' this Gum is so very Purgative, yet the Fruit of the Tree, to which it belongs, is perfectly harmless, and is eaten in the Country like Oranges.

Halimus, Offic. *Halimus latifolius* sive fructuosus, C. B. *Halimus latifolius*, sive *Portulaca marina incana major*, Park. Sea-Purflane. It grows in Hedges near the Sea, and flowers in Summer. The Roots help Contusions, and the Gripes. The Quantity of a Dram in Hydromel procures Plenty of Milk; the Leaves are boil'd for Food.

Harmala, Ger. *Ruta Sylvestris* Harmel. Offic. *Ruta Sylvestris* Syriaea sive *Harmala*, Park. Theat. Wild Rue. It grows in Physick Gardens, and flowers in July. The Herb and Seed are used. The Arabian Authors say, that the Seeds are so inebriating, as to make Men sleep a long Time, but that they are good in Melancholy Disorders. It partakes much of the

the Nature of Garden Rue, and provokes Urine.

Hedera arborea, Offic. *Hedera arborea* sive *Scadens* & *Corymbosa nigra*, Park. Theat. *Hedera communis major*, J. B. Ivy. It grows in many Places. The Leaves and Berries are us'd, as also the Gum, or Tear, which is a resinous, dry, hard and compact Substance, of a spadiceous Colour, somewhat inclining to a Yellow, and shines like Glass, but is not like that pellucid, and is of a sharp subastrigent, and sweet Taste. The Herb is heating, drying, and subastrigent. It is seldom exhibited internally, being tho't noxious to the Head and Nerves. Externally it is often applied to dry and cure Achors, and Ozænas. The Berries purge upwards and downwards, whence it is by the Vulgar given against Fevers. The Gum is a celebrated Caustic, and kills Nits.

Hedera terrestris Chamæcissus, Offic. *Hedera terrestris vulgaris*, C. B. Pin. *Calamintha humilior folio rotundiori*, Tourn. Inst. Ground-Ivy. It grows by Hedges, and flowers in April. The Herb is us'd, which is deem'd a good Vulnerary. It is frequently us'd for inciding and resolving the gross tartareous Matter of the Lungs, Kidneys, and other Parts, and consequently is efficacious in all Obstructions thence proceeding; as also in the Jaundice. The Syrup made of this Plant is good against a convulsive Cough; but chiefly against spitting of Blood, and bloody Urine.

Hedysarum Clypeatum, Mont. Indr. *Hedysarum Clypeatum flore suaviter rubente*, Boerh. Ind. A. *Onobrychis major perennis siliculis articulatis, asperis, clypeatis, recta Junctis, flore ruberrimo*, Hist. Oxon. French Honey-Suckle. It grows in Gardens, and flowers in July. The Herb is us'd which is deobstruent and vulnerary.

Helenium, Ger. *Enula Campana* *Helenium*, Offic. *Helenium sive Enula Campana*, J. B. Elecampane. It grows in watery Fields, and Meadows, and flowers in June and July. The Root is the Part us'd, which is both pulmonic and stomachic, alexipharmic and sudorific. Is chiefly us'd in Coughs, Asthmas, Crudities of the Stomach, in opening the urinary Ducts; in the Plague, and other contagious Distempers. Externally it is recommended in the Itch, Spasms, and Ischiadic Pains.

Helianthemum Vulgare, Park. Theat. *Panax Chironium Heliantbæmum*, Offic. *Chimæcifus Vulgaris flore luteo Panax Chironium sive flos Solis*, Merc. Bot. Dwarf-Sun-Flower. It grows in dry, chalky, and mountainous Places, and flowers in June and July. The Root and Herb are both used; the Root resists the Poison of Serpents, and other venomous Creatures; the Plant is vulnerary; a Decoction thereof, is successfully exhibited in Diarrhæas, Hæmorrhages, and Disorders of the Fauces; it is astrigent, hence in all Disorders where there is too great a Flux, it may be used in the Room of Cumfrey.

Helichrysum seu Chrysocome augustifolia vulgaris, Hist. Oxon. *Stæchas Citrina*, Offic. *Elichryson sive Stæchas citrina augustifolia*, Boerh. Ind. Alt. Goldy Locks. It grows in Gardens, and flowers in May. The Flowers are used in Obstructions of the Liver, Kidnies, Spleen, and the Menfes; they resolve coagulated Blood, dry up Catarrhs, kill Worms, and are said to cure the Jaundice.

Helichrysum sive Chrysocome caulis deciduis latiore folio Germanica, Hist. Oxon. *Stæchas citrina Germanica*, Offic. *Stæchas citrina Germanica latiore folio*, J. B. German Goldy Locks. It is found in Germany, and flowers in July. The Herb and Tops are used; it is heating, drying, aperient,

aperient, and abstergent, and is celebrated for its Use in all Diseases of the Brain proceeding from a cold Cause.

Helichrysum Orientale, C. B. Pin. *Chrysocome*, Offic. *Stoechas citrina floris magnitudine & colore speciosa*, J. B. Oriental Goldy Locks. It is found in the Island of Crete, and flowers in July. The Root is used, which is heating and astringent, and is good for those who labour under an Inflammation of the Liver and Lungs.

Helichrysum montanum flore rotundiore candido, Boerh. Ind. Alt. *Pes Cati*, Offic. Cats Foot. It grows in mountainous and chalky Places. The Herb is used, which is drying and astringent; the Syrup is highly esteemed in Exulcerations of the Lungs, and Spitting of Blood; it is recommended in convulsive Coughs of Children.

Heliotropium majus, Offic. *Heliotropium majus Dioscoridis*, C. B. Pin. Boerh. Ind. Alt. Turnsole. It grows in Gardens, and flowers in Summer. The Herb and Seeds are used; a Decoction of it potently evacuates all pituitous and bilious Obstructions by Stool, and is good against the Bites of Scorpions; the Seed represses all fleshy Excrecences, makes penile Warts wear off, provokes the Menfes, and facilitates Delivery.

Heliotropium minus, Offic. *Heliotropium minus supinum*, Tourn. Inst. *Heliotropium humi fusum, flore minimo, semine magno*, Tourn. Small Turnsole. It grows in Gardens; the Herb is used, which has all the Virtues of the proceeding ascrib'd to it.

Heliotropium tricoctum, Offic. *Heliotropium minus quorundam, Heliotropium tricoctum Plinii, Verrucaria*, Chab. *Ricinus humilis Althææ folio, fructu verrucoso rotundo*, Hist. Oxon. French-Turnsole. This Plant grows in several Parts of Languedoc, and flowers

in July and August. The Natives of Languedoc express the Juice of the Berries of this Plant, with which they strongly impregnate Linen Rags, and it is thus brought to us, and sold in the Shops for the Use of the Dyers. It is, also, used in Medicine, and is a most powerful Remedy against carcinomatous and gangrenous Ulcers, and strumous Tumors, according to Matthiolus.

Helleborine, Offic. *Helleborine latifolia montana*, C. B. Pin. Boerh. Ind. Alt. Bastard Hellebore. It grows in Copses, Woods, and shady Places, and flowers in May. The Herb is used, and is thought by some to possess the same Virtues as the white Hellebore, but it is seldom or never found in our Shops.

Helleborus albus, Elleborus, Offic. *Helleborus albus, flore subviridi*, C. B. P. White Hellebore. It grows in mountainous and craggy Places, principally in Germany. The Leaves, Roots, Stalk, or Flowers of white Hellebore, applied to the Skin of a living Person, excoriate the Part, and produce an Exulceration: They also burn the Tongue. The true white Hellebore of Hippocrates is celebrated on many Accounts. This Plant has a Caustic and burning Juice, which attracted into the Nostrils, after the Manner of Snuff, excites an invincible Sneezing, whence it appears to be a Ptarmic in the highest Degree. Taken into the Stomach it purges upwards and downwards with severe Gripings. Hippocrates says, that it purges the most remote Parts of the Blood, and therefore, before its Administration, he caused his Patients to bathe, and ordered them to drink Oil and Honey for some Days; by which Means all the Parts being relaxed, he then administered white Hellebore, and directed Gestation, either on Horseback, or in a Ship. When the Medicine began to work, he ordered his Patients rest. The

same Effect would indeed, in some Measure, follow from a right Use of our white Hellebore. But *Salmasius* writing of the *Veratrum*, or white Hellebore, says, that its Leaves are very finely jagged, which makes it doubted whether it be the same with ours. White Hellebore is much stronger than black Hellebore, and sometimes excites Convulsions, unless exhibited with great Prudence: Hence it is never given in Substance, but to Persons of the most robust Constitutions; and in melancholy and maniac Cases; and then with great Caution. It is also exhibited in quartan Fevers; in which an Ounce of the Decoction, taken inwardly, has often surprising Effects. It is a Plant, however, more adapted to Horses than Men; though used as a Sternutatory in soporous Diseases, as the Apoplexy and Lethargy. White Hellebore has been celebrated, even to a Proverb, for the Cure of Maniacs, and *Hippocrates* particularly recommends it in many Cases, and mentions a *μαλθακὴ ἐλαβερός*, soft or soft'n'd Hellebore, which was probably Hellebore prepar'd in such a manner as to render its Operation milder, and in most Cases he directs it after Supper, intending by that Means, probably, to mix it with the Aliments in the Stomach, that it might operate more gently and safely. *Herophilus* is also said to have entertain'd a very great Opinion of this Cathartic. *Aretæus* asserts, that it is not only a Vomit, but, also, the most efficacious and powerful Purge of all others: This good Service it does, he says, is not owing to the great Discharge of Humours it makes; for in the Cholera Morbus, there is the same Sort of Evacuation; nor is it owing to the violent Efforts it causes; for sailing upon the Sea excites more violent Efforts: But it is owing to a particular Virtue in it, which cannot be enough admired;

for though sometimes it purges but little, yet it nevertheless cures. In old Disorders, where all other Remedies have failed, Hellebore has succeeded. To those that breathe difficultly, it renders Respiration easy; to such as are pale it gives Colour, and makes those plump that were before emaciated. But notwithstanding all those Encomiums, white Hellebore by some Means lost its Reputation, and was but little used for many Years, till about the Year 500 *Asclepiodorus* a Physician, as we learn from *Photius*, revived its Use, curing many obstinate Distempers by it, and thereby acquiring great Reputation. At present I don't know that it is much used, except as an Errhine, and an Ingredient in Ointments for the Itch. But I have known it given by *Empirics*, in very large Quantities, without exciting any violent Symptoms, and even alone without any Corrector; and I also know that it has been given in Maniacal Cases, in the Quantity of eighteen Grains, together with twelve Grains of Castor, and in such a large Dose, without any Operation that was terrible, and with very great and good Effects to the Patient. I do not recommend this Practice, but rather leave it to the Consideration of proper Judges. Mean Time in Maniacal Cases, or others, where a violent Stimulation is necessary, as in Apoplexies, in which last Case it is recommended by *Celsus*, Hellebore either in Clysters, or taken into the Stomach, will certainly answer the Intention of stimulating in a very great Degree.

Helleborus niger, Offic. *Helleborus niger flore roseo*, C. B. P. Black Hellebore. It is cultivated in Botanic Gardens, flowering in January. The Root, especially the fibrous Parts of it, is used, and is said by almost all Authors, to purge powerfully melancholic Humours; but that which we make

make Use of in *England*, is so far from operating violently, that it scarcely purges at all, tho' given from fifteen Grains to two Scruples. It is particularly recommended in Madnefs, in the hypochondriac Passion and Elephantiasis, Herpes, Cancer, Quartan, Vertigo, Epilepsy, Apoplexy, and the Itch; but its great Excellence consists in promoting the Menfes, and carrying off the Waters in a Dropsy. It is given either in Substance, Infusion, Decoction, or Tincture. *M. Bolduc* gives some Experiments, which he made upon this Root, in the *Memoirs of the Academy of Sciences*, for the Year 1701. We shall not take Notice of those made by Distillation, because he himself believ'd them to be of no Consequence. The Extract which he procured with Spirit of Wine was very little in Quantity, because this Root contains few resinous Parts. And I am, says he, the more confirmed in this, since from what remained I was able to get a great Quantity of an Extract with Water. He also made an Extract of the Root with Water, wherewith was drawn all that could be extracted; for from the Residue there was nothing to be got, by Means of Spirit of Wine. Whence it seems reasonable to conclude, that the saline Parts are able so to dissolve its few resinous ones, that both may be drawn off by Water, without the Aid of Spirit of Wine. He further remark'd, that the first Extract, which was purely resinous, and made with Spirit of Wine, purged little, and with Irritation; that the Extract made of its Remainder, with Water, purged not at all, but was very diuretic; and that, on the other Hand, the Extract made first with Water, and without Spirit of Wine purged gently. And this, he says, he has observed of most Purgatives: Whence he thinks, that the Extract, made by Spirit of Wine alone, ought

to be suspected; since, being deprived of its proper Salts, which, when joined to the Ferment of the Stomach, open, divide, and attenuate the Resin, it happens that its thick and sulphureous Parts adhere to the Fibres of the Stomach, and cause Gripings, and, by remaining undissolved sometime, excite a Tenesmus. And this is confirm'd by Experience; for the most able practical Physicians correct the Resin with Salt of Tartar. He confesses that to be a good Method in these Cases; but supposes one may do without it, by leaving to those resinous Extracts the proper Salts which Nature has endued them with. Whence he affirms, that the Way of making the Extract with Water is preferable to the common Way of doing it by a sulphureous Menstruum; since thereby the Substance is freed from its terrestrial Parts, without depriving it of any of its natural Principles. He takes Notice, that the Hellebore which is brought from *Savitzerland*, is preferable to that which comes by the Way of *England*. This latter, whether it is spoiled by keeping, or losing its Virtue in Transportation, he found to have little or no Effect. So that, there is Reason to suspect very much, that our Hellebore falls greatly short of the Goodness of that used by the Antients; since we find there is so great a Difference between it, and what so near Neighbours as the *French* have in Use among them at this Time. Of ours, according to *Quincy*, fifteen or twenty Grains, in Powder, are frequently given as an Alterative and a Sudorific; and in Tincture, where the Root has been one Part, and the Menstruum three, it may be given to sixty, or one hundred Drops to a Dose. Its Virtues are best drawn, by rubbing a little Salt of Tartar with it in a gross Powder, and letting it lie till the Air makes it run; for that so penetrates

into the very Substance of the Root. that its Parts immediately join with the Menstruum, as soon almost as put into it. Small Wine is the best, as most likely to take up all the Parts of any medicinal Efficacy.

Helleborus niger hortensis, flore viridi, C. B. P. *Helleboraster*, Offic. *Helleboraster minor flore viridante*, Park. Theat. Bears Foot. It grows in mountainous Places, flowering in March and April. The Parts used in Medicine are the Root and Leaves. The Leaves taken in Beer are recommended for the Small Pox, and against contagious Distempers. The Root has the same Virtues with that of the black Hellebore, and may be taken instead of it; it purges the lower Belly, evacuating Phlegm, and yellow Bile. Farriers and Grainers put a great deal of Confidence in this Herb, against the Murrain among their Horses and Cattle. Their Method is to thrust a Bodkin thro' the Dewlaps of their black Cattle, thro' the Skin under the Neck of their Horses, and through the Ears of their Sheep, and then put a Fibre of the Root into the Wound; whence it is called *Peg Root*. The same is described by *Columella*, one of the *Rei Rusticæ Scriptores*, who wrote under the Empire *Claudius*.

Helleborus niger fœtidus, C. B. P. *Helleborastrum*, Offic. *Helleboraster maximus, sive Consiligo*, Park. Theat. Setter-Wort. It grows in woody Places, though but rarely, flowering in February and March. The Leaves are used, which, being dried and pulveriz'd, are exhibited in small Quantities to Children affected with Worms; and are esteem'd, by the common Sort of People, a most potent and certain Remedy: But *Tragus* very well observes, that it is not to be used internally, but avoided as a most pernicious Herb. How dangerous a Medicine it is, may be understood by the following Accident, related by

Dr. Martyn. Some Years ago, when the Ground was cover'd with a very deep Snow, a Flock of Sheep, in *Ox-Mead*, near *Fulborn* in *Cambridgeshire*, finding nothing but this Herb above the Snow; eat plentifully of it. They soon appear'd terribly out of Order, and most of them died, a few being saved, by timely giving some Oil, which made them cast up this Herb. Some of those which died, being open'd, were found to have their Stomachs greatly inflam'd. I myself once was Witness of the deleterious Effects of this Plant. A strolling Quack, sold a Worm Powder to an elderly Gentlewoman in the Country who kept an Inn, which she gave to several Grand Children who lived with her, with good Success; but one Dose being left, she took that herself, and about an Hour after, was very much disorder'd; I happen'd at that time to be talking to a Gentleman on the other Side of the Street; and was press'd by one of her Domesticals to visit her immediately, which I did directly, but she dy'd before I could get up Stairs.

Hemionitis, Offic. Boerh. Ind. Alt. *Hemionium sive Hemionitis quibusdam Splenium*, Chab. Mules Fern. It is said to grow in *Italy*. The Herb is used, which taken in Vinegar, according to *Dioscorides*, consumes the Spleen. *Bobart* says, it is a splenetic Herb, and possesses the same Virtues as the Harts-tongue; and *Boerhaave* esteems it an astringent, vulnerary, and pectoral Plant, efficacious in splenetic Disorders, as also Spittings of Blood.

Hepatica trifolia cœruleo flore, Boerh. Ind. Alt. *Trifolium aureum*, *Hepatica nobilis*, Offic. *Trifolium Hepaticum sive Trinitatis Herba flore cœruleo*, J. B. Noble Liverwort. It grows in Gardens, and flowers in the Spring. The Leaves only are used, which by modern Physicians are thought vulnerary; they corroborate

borate the Stomach by their astringent Quality; and therefore are esteem'd good where there is too great a Relaxation, and consequently are useful in vulnerary Drinks, in a Diabetes, Spittings of Blood, or bloody Urine, they are much extolled in Hernias; the Leaves pulverized are good in Dysenteries. A Decoction of the Leaves is effectual against the Jaundice, Itch, fetid Ulcers, and the Quinsey. The whole Plant is very good in Obstructions of the Kidneys, Bladder, and Liver: The Dutch make it an Ingredient in the Syrup of Sueory.

Herba Paris, Offic. Boerh. Ind. Alt. *Solanum quadrifolium bacciferum*, C. B. Pin. Herb Paris. It grows in shady Places, and flowers in May; and the Berries, which are used in Medicine, are ripe in July. These taken internally, are alexipharmic; the Leaves bruised, and reduced into a Cataplasm, and applied, are good in all pestilential Buboes, and other hot Tumors; the Plant is very good against Madness. *Tachenius* recommends it as good in Sciatic Pains; *Helmont* in livid Contusions; and *Buxbaum*, administer'd it with Success in hyteric Disorders. This Plant was formerly accounted poisonous, and rank'd among the Aconites, which is thought to be owing to *Fuchs*'s calling it *Aconitum Paralytisches*, yet more modern Authors attribute quite different Effects to it, esteeming it a Counter-poison, and Alexipharmic, and good in malignant and pestilential Fevers.

Hermodactylus, Offic. Park. *Colchicum radice ficcata alba*, C. B. P. *Hermodactyls*. According to the History of Plants ascribed to *Boerhaave*, this Plant purges most powerfully both upwards and downwards, in Consequence whereof, it is recommended in the Gout as a powerful Cathartic; it is also, commended as a Specific in the *Gutta Serena*;

on Account of its Viscosity, it is mixed with Ginger, being greatly subject to excite Gripes.

Herniaria, Offic. *Herniaria glabra*, J. B. *Millegrana major* sive *Herniaria vulgaris*, Park. Theat. Rupture Wort. It grows in sandy Places, and flowers in June and July; the whole Plant is used in Medicine, and is refrigerating and drying; it is chiefly used in the Cure of Ruptures, it provokes Urine, breaks the Stone in the Kidneys and Bladder, incides Muscosities in the Stomach and other Parts, expels Bile and Water, and consequently is efficacious in the Jaundice.

Herniaria Alfine folio, Tourn. Inst. *Arenaria*, Offic. *Anthyllis marina incana Alfine-folia*, Ger. Emac. Sea Chick-weed. It grows in maritime Places, and Vineyards, and flowers in Summer. The Herb, which is the Part used in Medicine, cures a *Paronychia*, and the *Favi*, being rubb'd thereon.

Hesperis, Offic. *Hesperis bortenensis flore purpureo* & albo, Boerh. Ind. A. *Hesperis flore purpureo albo* & vario, sive *Viola Matronalis*, Park. Theat. Dame Violets. They grow in Gardens, and flower in May and June. The Plant and Seeds are used, which, as *Clusus* says, cure Coughs, and Difficulties of breathing. *John Baubine* says they provoke Urine, and Sweat, that they incide, absterge, and digest. *Dodonæus* says, that as it tastes like Rocket, so it seems to be possessed of much the same Virtues.

Hieracium minus, Offic. *Hieracium folio Chondrilla, caule vimineo levi*, Boerh. Ind. A. *Hieracium minus præmorsa radice*, Park. The Lesser Hawkweed. It grows almost in all Pasture Grounds, and flowers in June and July. The Leaves are used, but the Juice seldom or never; it sharpens the Sight taken inwardly, and expels black Bile.

Hieracium, Offic. *Hieracium dentis Leonis obtuso folio majus*, C. B. Pin. *Hieracium macrocaulon junceum sine minus primum Dodonæo*, J. B. Long rooted Hawkweed. It grows in Pasture Grounds, and flowers in June, July, and August. The Leaves are commonly used, which have the Virtues of the other Species of this Plant, the Herb taken internally is a Remedy for Pains in the Sides.

Hieracium Clusii, Ger. *Hieracium alpinum, latifolium, maculatum, hirsutæ incanum, flore magno*, Boerh. Ind. A. *Herba Costa*, Offic. Hungarian Hawkweed. It grows on Chalky Hills, and flowers in June; the Herb is used, which is greatly extolled in all Diseases of the Lungs. It is of singular Use in Consumptions.

Hippocastanum vulgare, Boerh. Ind. A. *Castanea equina*, Ger. *Castanea equina folio multifido*, J. B. Horse Chestnut. It is cultivated in Gardens and Walks, and flowers in May and June; the Fruit is used which is esteemed Errhine, it is likewise said to be good for broken winded Horses.

Hippophaes, *Hippophaësum*, and *Hippomanes*, Offic. *Hippophaes Anguillæræ & Dodonæi, sive Spina purgatrix*, J. B. Purging Thorn. It grows in the Morea; the Juice of this is said to carry off by Stool all pituitous Humours.

Hordeum, Offic. *Hordeum distichum*, Ger. *Hordeum distichon quod Spica binas ordines habeat Plinio*, C. B. Pin. Boerh. Ind. A. Barley. It is sow'd in the Spring in Fields. The Seed is used, which is refrigerating, drying, abstergent, aperient, digestive, and emollient; it is also diuretic and nutritive, *Barboline* cured an epidemical Pleurisy only by a Decoction of Barley. It is an Ingredient in the *Decoctum Pectorale*.

Horminum Sylvestre Lavendulæ flore, C. B. P. *Oculus Christi*, Offic. *Gallitricbis affine Maru, si non Genus*

aliquod, Sclarea Hispanica, J. B. Wild Clary. It grows in gravelly Places, and flowers in June and July. The Seed is chiefly used, one of which if put into the Eye cleanses it of any Thing that is offensive, and takes away Redness, Specks, or Inflammations.

Horminum sativum, Offic. *Horminum sativum genuinum Dioscoridis*, Park. Theat. *Horminum Coma purpureo-violacea*, J. B. Purple spiked Clary. It grows in the Gardens of the Curious, and flowers in July. The Seed is used, which drank in Wine is esteem'd a potent Stimulus to Venerary. Mixed with Honey it clears the Eyes from white Specks. It stimulates the Nerves, and inebriates, and its heating Quality renders it very serviceable in the Dropsy.

Horminum sylvestre, Offic. *Horminum sylvestre latifolium verticillatum*, C. B. Pin. *Horminum Germanicum humile*, Park. Theat. Wild Clary. It grows frequently in Germany, and flowers in Summer, the Seed is used, and is said to possess all the Virtues of the preceding Species, but in a higher Degree.

Hyacinthus, Offic. *Hyacinthus Anglicus*, Ger. *Hyacinthus oblongo flore cæruleus major*, C. B. Pin. Hare Bells. They grow in Woods and Hedges and flower in April. The Root is used, which stops Fluxes of all Kinds, provokes Urine, and is of Service in the Jaundice.

Hyoscyamus, Offic. *Hyoscyamus major*, Ger. *Hyoscyamus major vel vulgaris*, Boerh. Ind. A. Henbane. It grows in uncultivated Places, amongst Rubbish, and by Ditch Sides, and flowers in June. The Parts used in Medicine are the Root and Herb. It is refrigerating and wonderfully emollient, induces Sleep, mitigates violent Pains, and Acrimony, but disturbs the Reason, whence it is but very seldom exhibited internally, yet is sometimes so administered to cure a Spitting

Spitting of Blood. The Seeds are exhibited in Hæmorrhages; from the Seeds is prepared an Oil which induces Sleep by anointing the Temples therewith, it is used in a Gonorrhæa and too copious Fluxes of the Menfes applied to the Region of the Loins and the Permæum.

Hyoscyamus albus, Offic. *Hyoscyamus, albus major, vel tertius Dioscoridis, & quartus Plinii*, Boerh. Ind. A. Hist. Oxon. White Henbane. It grows, tho' but seldom, in Botanic Gardens. The Seeds are only introduced into Medicine, which are exhibited to cure Spitting of Blood; they are of a milder Nature and consequently safer in the Administration, than those of the preceeding Species. The Juice of this Species is very good in an inveterate Cough, proceeding from a Defluxion of saltish acrimonious Humours, the dreadful Forerunner of a Pthisis; in order to prevent which the Egyptians before they betake themselves to rest, take a Spoonful of the Seeds, finely tirturated with an equal Quantity of powder Sugar, by which they procure considerable Relief, by its blunting and sweetning the Acrimony of the saltish Humours, and inducing Sleep; their Women do the same, for an immoderate Flux of the Menfes. The Juice expressed from the green Stalks, Flowers and Seeds, or the dried Plant, macerated in warm Water and then bruised, mitigates acute Pains especially of the Eyes, for which purpose Collyriums were prepared of it, and the same Preparation was used, for violent Pains in the Ears, tho' in the Opinion of modern Practitioners, all those Medicines which take away the Sense of Pain, and which were called *Narcotics* cannot but be pernicious if too frequently used, for what takes away the Sense of Pain, must diminish the sensitive Faculty.

Hypocoum, Offic. *Hypocoum latiore*

folio, Boerh. Ind. A. *Hypocoum filiquosum*, J. B. Horned Wild Cummin. It grows in *Provence* and *Languedoc*, and flowers in *May*. The Herb and Juice are used. According to *Dioscorides*, it possesses the same Virtues as the Poppy, nor do the modern Accounts differ any thing from his. *Herman* says, that its Juice induces Sleep as well as *Opium*.

Hypericum, Offic. *Hypericum vulgare, sive perforata caule rotundo, foliis glabris*, J. B. *Hypericum vulgare, perforata, Fuga Demonum*, Merc. Bot. St. John's Wort. This grows in Hedges and Thickets, and flowers in *July*. The Herb, Flowers and Seeds are used; they consist of subtile Parts, are Diuretic and Vulnerary. They are chiefly used in cleansing and consolidating Wounds, in resolving coagulated Blood, in dissolving the Stone in the Kidneys, and killing Worms. Outwardly applied it is reckon'd good in Contusions, especially those of the Nerves, as also in Tremors and Wounds. The Tincture of the Flowers is good in Maniac Disorders. It is an Ingredient in the *Mithridate*, the *Theriaca Andromachi*, and the *Oleum Hyperici*.

Hypocissis, Offic. *Purpurea flore candicante & flore luteo*, T. Corah. Minor a Cisto Nascens, Hist. Ox. Rape of Cistus. The Juice is used, which is refrigerating, drying, most powerfully astringent and condensing; it is chiefly used in stopping Fluxes of any Kind, Diarrhæas, Dysenteries, Lientery, immoderate menstrual Discharges, Vomitings, and Hemorrhages. It is an Ingredient in the *Pulvis e Succo compositus*, *Mithridatium*, and *Theriaca Andromachi*.

Hyssopus, Offic. *Hyssopus vulgaris*, Park. Theat. *Hyssopus officinarum caerulea sive spicata*, Boerh. Ind. Alt. Hyssop. It grows in Gardens, and flowers in *July* and *August*. The

Herb is used; which is attenuating, aperient, and abstergent. It is chiefly used in all tartareous Disorders of the Lungs, Coughs, and Asthmas. It is often externally applied in Sugillations of the Eyes, to cleanse the Uterus, to remove Noise in the Ears, and to cleanse the Mouth. Some prefer it to Wormwood for fortifying the Stomach.

Jacea, Offic. *Jacea nigra pratensis latifolia*, C. B. Pin. *Jacea nigra vulgaris*, Park. Knapweed or Mat-fellon. It is too frequent in Pasture Grounds, flowering in *July* and *August*. The Herb is used, which is good against Tumors of the Tonsils, Hernias and Wounds.

Jacea foliis Cichoraceis, altissima, flore purpureo, Tourn. *Stoebe*, Offic. *Stoebe major foliis Cichoraceis molli-bus lanuginosis*, C. B. Silver Knapweed. It grows with us in Gardens, and flowers in *July*. The Herb and Seed are used, which are both astringent, wherefore a Decoction is good for those who labour under a Dysentery. It is likewise intilled into purulent Ears; a Linctus prepared of the Leaves, removes Lividness, occasioned by Blows about the Eyes, and stops violent Eruptions of Blood.

Jacobæa, Offic. *Jacobæa vulgaris laciniata*, Boerh. Ind. A. *Jacobæa vulgaris major*, Park. Ragwort, or Seggrum. It grows in watery Places near Path Ways, and uncultivated Places, and flowers in *July* and *August*. The Herb is used, which has the same Virtues as Groundsel. It cures all Wounds, Inflammations, and Fistulas; applied in the Form of a Cataplasm, it is good against the Gripes from a violent Dysentery; of it is prepared an excellent Gargarism against the Quinsy, and Inflammations of the Tonsils.

Jalapium Mechoacana nigra, Offic. *Convulvulus Americanus*, *Jalapium dictus*, Raji Hist. *Bryonia Mechoacana nigricans*, C. B. Pin. Jalap. The

Root is used, which is brought to us from the *Indies*, the Root only is used which powerfully purges all noxious, but more in particular, all ferous Humours. *Wepfer* in his *Treatise de Cicuta Aquatica* says, it is one of the best Cathartics we have, and wonders it is so little used, since it wants no Corrector on one Hand, nor any thing on the other to promote its Operation, which can hardly be said of any other Purgative; as one Part of the Root may abound more with the purgative Quality than an other the Dose of the Resin is much more certain.

Jasminum, Offic. *Jasminum album*, Ger. *Jasminum sive Gelseminum flore albo*, J. B. White Jasmine, or Jessamy. It is cultivated in Gardens, and flowers in Summer, the Flowers are used, which are digestive, heating, emollient, and aperient; its internal Use is principally to heat and relax the Uterus, and to cure a Schirrus; it promotes Delivery, is good for a Cough and Difficulty of Breathing, Pleurisy, and Pains of the Stomach, Intestines, and Uterus.

Ilex aculeata cocciglandifera, C. B. Pin. Boerh. Ind. Alt. *Ilex aquifolia sive Coccigera*, Park. Theat. The Scarlet Oak. The Produce of this Plant used in Medicine, is the *Kermes*.

Ilex folio rotundiori molli modiceque sinuato, sive Smilax Theophrasti, C. B. Pin. *Smilax Arborea*, Offic. *Smilax Arcadum glandifera, major*, Park. Theat. The great Scarlet Oak. This is frequent in *Italy* and *Languedoc*, the Bark Leaves, and Acorns are used, which are esteem'd more astringent than those of the Oak.

Imperatoria major, C. B. P. Boerh. Ind. A. *Imperatoria & Astrantia*, Offic. Master Wort. It is cultivated in Gardens, and flowers in *August*. The Part used in Medicine, is the Root which is both Alexipharmic and Sudorific; it is chiefly used in contagious

contagious Distempers and Contusions, in phlegmatic Disorders of the Head, Palsy, Apoplexy, and in Cruities of the Stomach, and the Colic; it is a most divine Remedy in the Colic, and flatulent Disorders, according to *Hoffman*.

Indicum, Offic. *Emerus Americanus Siliqua incurva*, Tourn. Inst. *Polygala Indica frutescens Hermannii*, Raii Hist. Blue Indigo. This is a well known Preparation from a Plant which grows in Brasil, to the Height of two or three Feet, resembling Rosemary. This Preparation is generally thought to be of an attenuating and penetrating Nature, in Consequence of which it is said to be beneficial in a Jaundice. It surprisingly stops Fluxes, because it is a strong Astringent. In *Ephimer. Ger. An.* 11. *Obj.* 113. it is recommended for stopping immoderate Discharges of the Lochia, and for curing a falling down of the Uterus and Anus. Indigo was formerly thought to be possessed of a poisonous Quality, and according to *Paulus Amandus*, it was once accounted of so corrosive a Nature, that, the Electors of Saxony, prohibited the Importation of it into their Territories.

Ipecacuanha, Offic. Pomet. *Ipecacuanha Brasiliensis*, Raii Hist. *Periclymeno, acedens Planta, Brasiliiana, flosculis congestis albis*, Brazilian Root. This is the Root of a Plant produced in Brasil, New Spain, and various other Parts. There are generally three Kinds of it found in the Shops, the Grey, the Brown, and the White; the Grey is generally reckoned best, and most commonly used, when it can be had. Great Care ought to be taken in our Choice of this Root, since according to Sir *Hans Sloan*, in his natural History of *Jamaica*, there is a poisonous *Apoecynum* whose Root greatly resembles it. Mr. *Boulduc* after reiterated chymical Analyses, of these three Kinds of the Root, found that their Vir-

tues consisted not only in their Resin, but also in their saline Parts. This curious Gentleman also found Means to deprive this Root of its emetic Quality, the Difference between this and other violent Purgatives having encourag'd him in this Research; the other drastic Cathartics as Scammony and Colequintida, however prepar'd or corrected, leaving too often, fatal Marks of their Action, whereas Ipecacuanha, tho' it may appear very brisk in its Operation, leaves generally behind it no more than an Astringency of the Part it had before opened, and fatigued. He made a resinous Extract with Spirit of Wine, and then drew out the saline Particles with Rain-water, and found by Experience that its Violence, as in most other Purgatives, was owing to its Resin. For the Effects of the Resin were more violent than those of the Root itself, leaving little or no Astringency afterwards; but the saline Extract, was diuretic, purg'd gently, with little or no Nausea, and in short was possessed of the specific Quality of the Root in curing Dysenteries. The Root is given from fifteen Grains to half a Dram, and we ought never to exceed a Dram. It never fatigues the Stomach, and is the best Succedaneum for emetic Tartar. It is the best Specific in Dysenteries hitherto known, acting in such Cases, not only as an emetic, but also deterring Ulcers in the Intestines by a Mucilage contain'd in it, like that of Marshmallows, by which it in some Measure supplies the villous Coat of the Intestines, when corroded and destroy'd by the Disease. It also powerfully agitates and evacuates the Glands of these Parts. Its most celebrated Effects are those produc'd in cold Dysenteries after many other Medicines have been tried, and the Body has by these been sufficiently prepared. Then the first or second Dose, generally produces visibly

visibly happy Effects, or if it should happen otherwise, it ought to be continued every Day, in the Quantity of three or four Grains, acting in that Case as an Alterative. This Root has at once an emplastick and deterfivè Quality, and tho' it does appear sensibly acrid, yet it produces, in those who powder it, an Oppression of the Thorax, Difficulty of Breathing, and Spitting of Blood. It is likewise of fensive to the Eyes, increases the Discharge of the lachrymal Glands, and when the Tears do not find a ready Vent, produces a Swelling of the Eyes. These Effects are probably owing to the mucilaginous Quality of the Root. It is used in Substance, reduced to a fine Powder, either mixed with a Liquid, or incorporated with some proper Syrup into an Opiate. It may likewise be given in Infusion, Decoction, or Tincture.

Iris vulgaris nostras, Offic. *Iris vulgaris*, Raii Hist. Common Flower-de-Luce. This is by Transplantation into Gardens render'd more beautiful, flowering in May. The Root when recent is of a drying Nature, and is used as an Hydragogue, and Errhine. It is principally employ'd in evacuating the Waters of dropfical Patients. Externally it is used in Impetigos, and for removing other Defedations of the Skin.

Iris florentina, *Iris Illyrica*, Offic. *Iris alba florentina*, C. B. Tourn. Inst. Florentine Orris. This is cultivated in Gardens, and flowers in May. Its Root is of a fragrant Smell, and possessed of an inciding, attenuating, expectorating, digerent, abstergent, and emollient Quality. It is principally used in Obstructions and Infarctions of the Lungs, Coughs, Asthmas, Obstructions of the Menfes, and Gripes in Children. Externally it beautifies the Skin, removes Freckles, and sweetens the Breath.

Iris fætida, *spatula fætida*, *Xyris*, Offic. *Iris fætidissima seu Xyris*,

Tourn. Inst. Stinking Gladdon. This grows in Hedges and Thickets, flowers in June, and is rarely to be met with. The Root is used, which is of a drying Nature, and principally recommended in the King's Evil, hysteric Passion, Orthopnea, and hypocondriac Disorders.

Iris humilis seu Chamæiris angustifolia graminea, Herm. Cat. *Iris angustifolia prunum redolens major & minor*, C. B. Pin. Tourn. Inst. Grass-leaved Flower-de-Luce. This is cultivated in Gardens, and flowers in May. The Herb itself is used, and is said to agree in Virtues with the first mention'd Species.

Jujuba, Offic. *Ziziphus seu Jujuba major*, Raii Hist. *Ziziphus*, Tourn. Inst. Boerh. Ind. Alt. The Jujube Tree. This is cultivated in the Gardens of Spain and Italy. The Fruit is used, being moderately heating and moistening. It is principally recommended in Asperities of the Lungs, Coughs, Pleurifies, Acrimony of the Urine, Effervescence of the Blood, and Erosions of the Kidneys and Bladder.

Oenoplia, Offic. *Oenoplia spinosa & non spinosa*, Ger. Emac. Raii Hist. The Great Jujube. This grows in Egypt, Crete, and some other Countries. The Fruit is used, and when immature is of an astringent Quality, removing the Relaxation of the Stomach and Intestines. The Juice of the ripe Fruit purges the Stomach of Bile.

Jujuba Indica, Raii Hist. *Jujuba Indica, rotundifolia, spinosa, foliis majoribus, subtul lanuginosis & incanis*. Breyn Prod. Commel. flor. Mal. The Lacca Tree of which only the Gum is used in the Shops. This Gum is distinguish'd into three Kinds. First, the *Stick-lack*, which is a resinous, hard and friable Substance, of an unequal granulated Surface, of a red Colour, a resinous Taste, and of a grateful Smell

Smell whilst burning. Secondly, The *Seed-lac*, which consists of resinous, hard and friable Grains, of a reddish Colour, pellucid, and of the same Taste and Smell with the preceeding. Thirdly, *Shell-lac*, which is made of the purest Grains melted into a Mass, of a reddish Colour and almost transparent. This Gum is heating, attenuating and aperient. It also purifies the Blood, excites Sweat, and is diuretic. It is principally recommended in Obstructions of the Spleen, Gall Bladder, Liver and Lungs, for which Reason it is accounted beneficial in the Dropsy and Jaundice.

Juncus vulgaris, Offic. *Juncus lavis*, *panicula sparsa*, *major*. C. B. Pin. Boerh. Ind. Alt. Common Soft Rush. This grows in marshy Places.

Juncus acutus capitulis Sorgi, C. B. Pin. Raii Hist. Boerh. Ind. Alt. Pricking large Sea-Rush. This grows in maritime Places, and the Herb and its Seeds are us'd.

Juncus aquaticus maximus, Ger. Emac. Raii Hist. Boerh. Ind. Alt. Bull-Rush. This grows in Rivers and large Fish-Ponds. The whole Plant is us'd. The Seeds of these three Species when toasted stop Fluxes and the excessive menstrual Discharges of Women. They also provoke Urine and procure Sleep. The Plant when tender, is applied externally against the Bites of the Phalangium, a Sort of highly venomous Spider.

Juncus odoratus sive Aromaticus, C. B. Pin. *Gramen ad Juncum accedens Aromaticum majus Syriacum*, Hist. Oxon. Camels-Hay. This is brought from Arabia. Its Top and Leaves are us'd, being of an acrid, bitterish, and as it were sweetish Taste, and of an highly grateful Smell. It is heating, subastringent, attenuating and discutient. It is principally us'd in Obstructions of the Menfes, of the Liver and Spleen, in Inflations of the Stomach, Vomitting and Hiccup; in Difficulty of Urine,

and Pains of the Kidnies, Bladder and Uterus.

Juniperus, Offic. *Juniperus vulgaris fruticosa*, C. B. Pin. Tourn. Inst. Boerh. Ind. Alt. The Juniper-Tree, or Bush. It grows in Thickets, and the Wood, Berries, and Gum are us'd. The Gum, which is the Gum-Sandarac of the Arabians, is a resinous, dry, whitish, pale Substance, concreted into Drops, of a resinous Taste. By a chymical Analysis we obtain from Juniper a fix'd Salt, loaded with a great deal of more Acid than is necessary to saturate it. Thus by a chymical Analysis of Juniper, we obtain several acid Liquors, and a fix'd, but no volatile, Salt. 'Tis to be observ'd, that the Plant is involv'd in a great deal of Sulphur, and some terrestrial Parts. Juniper-wood yields, besides the etherial Oil, a great deal of Oil thicken'd to the Consistence of a Syrup. Its Berries yield a great deal more, and its Top a little less. It is no hard Matter to perceive that all these Principles should render the Juniper good to restore the Functions of the Stomach, to dissipate Wind and other Substances which produce acute Pains, to clear the Lungs, and evacuate that gross Lymph, which often occasions Difficulty of Breathing. The Plant is also sudorific, cephalic, and anti-hysterick. It provokes the Menfes, removes Obstructions of the Viscera, restores their Elasticity, and gives a free Passage to the Urine. The Wood, the Tops and Berries are us'd. A Decoction of the Wood volatilizes the Blood, and purifies it by insensible Perspiration, much after the Manner of *Guaiacum*. A Sempucium prepar'd with this Wood, gives great Ease to those afflicted with the Gout. The Wine in which the Tops of Juniper have been boil'd is very diuretic. *Tragus*, *Matthioli*, *Hartman*, and *Simon Pauli* affirm, that they have cur'd some Persons of a Dropsy

a Dropsy, by Means of this Wine. The Honey of Juniper, which is no more than the Berries boil'd with Honey, is excellent in Clysters for the Dysentery and Tenesmus. It is customary to burn the Fruit of this Plant in order to remove a pestilential Air, and an Infusion of it in Vinegar is us'd in the Time of the Plague to wash Letters, Linen, and common Utenfils. The celebrated *Frederic Hoffman*, in *Tr. de Præstantia Remed. Domest.* speaks in the following manner, "The whole of the Juniper Tree is possess'd of a medicinal Quality, because the Whole of it is balsamic. Its Wood is so far from being inferior to the exotic Woods Guaiacum and Sassafras, that it may not only be commodiously us'd as a Succedaneum to them; but, is also preferable to them in my Opinion, in all Disorders arising from an impure State of the Humours. Its Berries in Consequence of the large Quantity of balsamic Oil they contain, whether used in Substance, reduc'd to a Rob, or toasted and used with Water by Way of Coffee, are highly efficacious in all those Disorders which arise from Obstructions of the Viscera, or a thick and viscid Condition of the Blood; for which Reason they are of great Service, in Asthmas, Cachexies, the Jaundice, the Colic, the Stone of the Kidnies and Bladders, as also in Crudities of the Stomach. Some Physicians of no inconsiderable Character inform us, that large Numbers of dropfical Patients have been cured by a Lixivium of the Ashes of this Tree, exhibited in Wine."

Juniperus major, Offic. *Juniperus major* Baccâ cæruleâ. C. B. Pin. Tourn. Inst. The Black Juniper. This grows in Greece. The Wood

and Berries are used, agreeing in Virtues with the former Species.

Juniperus Alpina, C. B. Raii Hist. *Juniperus minor montana folio latiore, fructuque longiore*, C. B. Pin. Tourn. Inst. Dwarf-Juniper, Wild-Savine. This grows on Mountains; the Herb itself being used. A Decoction of its Tops, or its express'd Juices, is said to be good for destroying that Species of Vermin called Bots, which are sometimes lodg'd in the Stomach and Intestines of Horses.

Jupicai Brasiliensibus. A Species of Grass which grows in *Brasil*. *Piso* informs us that this Plant rub'd upon the Part affected, is highly beneficial in an Impetigo, and eases the troublesome Itching.

Kali, Offic. *Kali Cochleatum majus*, Park. Theat. *Kali majus cochleato Semine*, Raii Hist. Tourn. Inst. Boerh. Ind. Alt. Glass-wort. The Herb is used and grows in saltish Soils and on the Sea-Coast. There are various useful Preparations of this Plant; such as, 1st, *Pot-ash*, which is no more than a Quantity of this Herb burnt to Ashes, and concreted into a blackish cineritious Mass. This is acrid, pungent, caustic, and possess'd of the same Virtues with the Plant itself, tho' stronger. 2dly, *Salt of Glass*, or *Sandiver*; this is a Kind of Salt of a cineritious Colour and of an acrid, pungent Taste. It is possess'd of the same Virtues with the Pot-ash, and is used by Farmers for cleansing the Eyes of Horses. It is also useful for cleansing the Teeth, drying running Ulcers, and curing the Herpes, Impetigo and Itch; 3dly, The *Lixivium*, Offic. or *Soap-Lye*, which is a Solution of the Pot-ash in Water. This is possessed of an acrid, corrosive and caustic Quality. This is used for removing Spots on the Skin, as also for curing Alphi, Freckles,

kles, and Sun-burn; but it should be cautiously used lest it should corrode the Skin. Of this Lixivium is prepared that celebrated Caustic known in the Shops by the Name of *Lapis infernalis*; 4thly, the *Sapo*, Offic. Soap, which is of three Sorts; 1st, common Soap, which is prepared of coarse Oil, Suet and Pot-ash, boil'd to a proper Consistence, and if to this a proper Quantity of Scot is added, black Soap is produced; 2dly, *Castile Soap*, which is prepared in the same manner with the former, only instead of common Oil, that of Olives is used, and the Mass ting'd with Indigo or some other Substance, of a blueish Colour. 3dly, *White or Venice Soap*, which is prepared much in the same manner with the others. Soap is aperient, digestive, detergent, and diuretic. It also opens Obstructions of the Liver and Spleen, and expels Sand and Gravel. Externally applied, it attracts, and cures Burns when not exulcerated, especially the Black-Soap, which also destroys all Kinds of Lice, and especially Crab-Lice. It is however to be observ'd, that the Lixivium of the Shops may be prepared not only of Pot-ashes but also of the Ashes of any burnt Wood. 5thly, *Sal Alkali*, Offic. or *Alcaline Salt*. Tho' this properly speaking is the Salt extracted from Pot-ashes, yet in a more extensive Sense, it comprehends. 1st, The volatile Salts obtain'd from the Parts or Excrements of Animals, as Salt of Hartshorn, and that of Urine. 2dly, The fix'd Salts obtained from the Ashes of Plants, such as the Salt of Kali and that of Wormwood.

Kali Hispanicum, Cod. Med. *Kali Hispanicum*, *supinum Annuum*, *Sedi foliis brevioribus*, Aët. Reg. Par. An. 1719. Alicant Glass-wort; which is employ'd in preparing Alicant-Soap.

Kina Kina, vel *Cortex Peruvianus*, Offic. Ind. Med. *Arbor febrifuga Peruviana*, *China China*, & *Quin-*

quina, & *Gannanaperide dicta*, Raii Hist. The Jesuits-Tree. This is a pretty large high Tree like the Lime-Tree, growing in the Inland Parts of Peru, on the Mountains near *Loxa*, or *Loja*, in the Province of *Quito*. Its Bark is uneven and thick, with a Colour resembling that of Cinnamon, Coffee, or Rust of Iron. The Spaniards say, that the Use of this Bark, was discover'd in the following Manner. Near the Town of *Loxa* was a Lake surrounded with *Quinquina* Trees, before the Spaniards settled in that Country. These Trees being by some Accident thrown into the Lake communicated a bitter Taste to the Water, so that the Inhabitants who before used to drink it, could use it no longer. An Indian, however, who had a violent Fever upon him, and consequently an intense Thirst, finding no other Water, was forced to drink of this, by which he was perfectly cured. He related this Accident to some of his Neighbours, who having made the same Experiment were also cured. Upon this they set themselves to discover what had given this febrifugous Quality to the Water of the Lake, and found in the first Place, that a great Number of Trees had fallen into it; and secondly, that after a certain Time, these Trees being rotted in the Water, it lost its bitter Taste, and at the same Time its Virtue; whence they concluded, that its Virtue was owing to the Trees. Then they infused all the Parts of these Trees in Water, and thus discover'd that their whole Efficacy resided in the Bark. This Medicine, however, remain'd as a Secret to the Spaniards till 1640, when it was discovered by a Soldier, who, by its Means had the good Fortune to cure the Vice-Queen of Peru, of an intermittent Fever, which had so far baffled the Skill of the Physicians, that her Life was despair'd of. This was a Circumstance

of so striking a Nature, that the *Spaniards* afterwards used it with uncommon Success, and in 1649, *Father de Lugo*, a Jesuit, then Procurator General of his Order, and afterwards a Cardinal, brought it into *Rome*, upon which the Society of Jesuits began to bring it into Reputation in *Europe*, by which Means they got a great deal of Money in a short Time, since they sold it for more than its Weight in Gold, and never parted with it but in Powder, in order to disguise it the better. Two Drams were at that Time thought sufficient for the Cure of any intermittent Fever, because they never gave it till after many other Medicines had been made Trial of. At this Juncture the Physicians were greatly divided with respect to the *Peruvian Bark*, some looking on it as a divine Medicine, whilst others believed it dangerous, and even fatal in many Cases. But notwithstanding the Opposition it met with, it at last acquir'd a great Reputation, by Means of the judicious and successful Experiments made by the *English* Physicians. The Enemies to this Medicine, who still have their Abettors, pretended from their own Experience, that it was not only attended with violent Relapses, but also brought on new and incurable Diseases; such as Cachexies, cedematous Tumors of the Feet, Dropsies, obstinate Costiveness, Oppression of the *Præcordia*, hypocondriac and hysteric Disorders, slow and hectic Fevers, accompanied with a Loss of Strength and Appetite, Consumptions, and some Times Convulsions and Epilepsies in Children. *Baglivi* affirms, that Fevers cured by the Bark either return in a few Days, or are succeeded by Asthmas, Dropsies, slow Fevers, Consumptions and other dangerous Disorders. Many learned and eminent Physicians object against the Bark, that its a-

stringent and corroborating Qualities, suspend the febrile Commotions of Intermittents, but do not remove the Fever, which afterwards induce Relapses, or perhaps more terrible Disorders. But, it is certain, that the Bark, exhibited duly and in Conjunction with other suitable Remedies, has a Tendency to remove the Causes of Fevers by promoting Perspiration and restoring the due Tone of the Solids. Besides, the Bark is possess'd of a bitter Quality, which is universally allow'd to be a proper Remedy for Fevers, since almost all Bitters, such as Wormwood, *Carduus Benedictus*, Fumitory, the lesser Centaury, and others of a similar Nature, are esteem'd excellent Febrifuges. Some alledge that it is certain from Experience, that many Persons afflicted with Fevers, have by this Medicine been hurried into dangerous and incurable Diseases, as slow and hectic Fevers, Cachexies, and others of a similar Nature. But it is to be observed, that before the Fever, the Humours and Viscera are generally disposed to these Diseases, and that the bad Regimen of the Patient may contribute to their Production. Besides, it is sufficiently evident, that the most efficacious Remedies, such as Venesection, Purgatives, Emetics, and Opiates, if used without Judgment, are equally pernicious and fatal; so that the Bark, tho' on some particular Occasions improper, is yet so far from being in general an unsafe and dangerous Remedy in Fevers and other Distempers, that it is highly safe, efficacious and innocent, especially in the Hands of a Physician who administers it with Judgment and Reason, since its bad Effects do not proceed from the Medicine itself, but should be deservedly attributed to the improper Use of it, the Errors of the Patient, or a Neglect in removing the peccant Reliques. But however noble a Febrifuge the Bark

Bark may be, yet it is by no Means to be exhibited till the Primæ Viæ are cleansed from the Collection of peccant Humours with which they abound. Nor should it be prescrib'd, especially in a considerable Quantity, if the abdominal Viscera are obstructed or infarcted with Blood and Humours, before these Obstructions are open'd, and the Infarction remov'd. Nor is the Cure of intermittent Fevers to be undertaken with the Bark in manifestly plethoric, cacochymic, cachectic, and hypocondriac Patients, or when critical Evacuations of Blood are suppressed. Great Caution is also necessary, if the Patients to whom this Febrifuge is to be given, have their Strength and Blood exhausted; if they are obnoxious to exorbitant Passions; if they are cold, and if the Fevers themselves approach to a continual hectic, or a slow Fever; if there is a continual Costiveness; if the Urine is limpid and without any Sediment; if the Hypocondria are tumid, or an Autumnal, or Winter Fever has already been long protracted; for in such Cases it is better to moderate the febrile Commotions by gently evacuating and corroborating Medicines, till at last, as it frequently happens, the Fits spontaneously cease, either by a Change of Place, a more exact Regimen, or the Influence of a serene and warm Air. It is of great Importance to the proper and salutary Use of the Bark in what Form, Dose, Season, and under what Regimen it is to be exhibited. As to the Form, it is most commodiously given in Substance in a proper Vehicle without any Addition. But if the Stomach nauseates it in this Form, there are several Methods of preparing it in a more agreeable Manner. As to the Dose of the Bark, it ought never to be given in large Quantities, as a Dram or more at a Time. But it is more adviseable to give at different

Times, one or two Scruples only on the intercalary Day, after the Fit, every three Hours, drinking after it a sufficient Quantity of Water, Decoction, Broth or Beer. As to the Time, we ought to persist in this Method of Cure, at least for a Week; then the Fever being gone, and the Appetite returning, a Dose should be taken once every Day, and after that every other Day. Besides the peculiar febrifuge Quality of the Bark, it is also of singular Service, not only in stopping the Progress, but also in perfecting the Cure of begun Gangrenes and Mortifications.

Knawel, Offic. *Polygonum Germanicum* sive *Knawel Germanorum*, Park. German Knot Grass. It grows in sandy Fields. The Herb is used, which is drying, astringent, and vulnerary; and by some is esteem'd Lithontriptic.

Lachryma Jobi, Offic. *Lithospermum Arundinaceum* forte *Dioscoridis*, C. B. P. Job's Tears. It is cultivated in Gardens, the Seeds are used, which take their Name of *Lachryma Jobi*, from their resembling Tears: They are detergent and aperitive, and therefore good for the Stone in the Kidneys and Bladder.

Lactuca, Offic. *Lactuca sativa*, Boerh. Ind. A. Garden Lettuce. It is sown in Gardens, the Leaves and Seed are used. Galen in the Decline of his Age suffer'd very much, by want of Sleep, for which Disorder he used in the Evening to eat a Lettuce, which was his only sovereign Remedy. For a Phrensy, Delirium, burning Fever, and other like Disorders, *Simon Pauli* recommends a double or treble linnen Cloth, well moistened in Water of Lettuce, in which purified and crystallized Nitre, or *Sal Prunella* have been dissolved, in the Proportion of half an Ounce to a Pint, to be applied to the Temples the Coronal Suture and the Wrists. *Athenæus* and *Constantine Cæsar* say,

this

this Plant was by the *Pythagoreans* call'd the *Eunuch*; and the Ancients fabled, that, after the Death of *Adonis*, *Venus* lay upon a Bed of Lettuces, in order to repress her lewd Inclinations; and for this Reason, some of the *Pagans* made a religious Scruple of eating them. Lettuces in general are esteemed, emollient, refrigerating, saponaceous, resolvent, diuretic, and somewhat laxative; but are better raw than boil'd.

Lactuca sylvestris, Offic. *Lactuca sylvestris major odore Opii*, Ger. Wild Lettuce. It grows in Hedges, flowering in *June*. The Herb and Seeds are used, and are effectual for mitigating Pain.

Lactuca sylvestris Costa Spinosa, C. B. Pin. *Lactuc sylvestris laciniata*, Park. Jagged leaved wild Lettuce. It grows in Hedges, flowering in *June*. The Herb and Seeds are used. It agrees in Virtues with the former.

Ladaum. This is a Gum ouising out of the *Cistus Ladanifera*, Offic. *Cistus*, *Ledon Cretense*, C. B. Pin. This Gum mollifies, digests, matures, and attenuates, and externally used is Anodyne, and good for the Tooth-ach. Alopecia, Heart-burn, Pains of the Stomach, and hysteric Fits. In *Dioscorides's* Time, this Gum was gathered from the Hairs of the Goats, which fed among the Trees which produce it, but at present, according to *Tournefort*, the *Greek Monks* gather it from the *Cistus Ladanifera*, with a Sort of Rakes. It is an excellent Balsamic in Dysenteries and Hoarsenesses.

Lamium rubrum, Offic. *Galeopsis*, sive *Urtica iners*, flore & folio minore, J. B. Red Archangel. It grows in Hedges by Highways. The Leaves and Flowers are used. The Flowers are good to stop a Dysentery, and Hæmorrhages from Wounds. The Herb bruised is said to discuss Tumors, and to be serviceable to Wounds,

putrid Ulcers, and Inflammations; and is recommended for an Excess of the *Catamenia*.

Lamium album, *Urtica mortua*, Offic. *Galeopsis sive Urtica iners, floribus albis*, J. B. White Archangel. It grows by Hedge Sides, flowering in *April* and *May*. The Flowers are used. The Plant is emollient, incising, diuretic, and lithontriptic, and good against hysteric Fits. The Root is recommended against the Jaundice, and the Flowers are accounted a Specific against the *Fluor Albus*.

Lampsana, Offic. *Soncho affinis Lampsana domestica*, C. B. P. Nipplewort. It is found in Gardens and Fields, flowering in *June* and *July*. It is said to be drying, detergent and digestive, and is esteemed excellent for curing ulcerated Nipples, from whence it derives its Name *Nipplewort*.

Lapathum Alpinum folio subrotundo, Boerh. Ind. A. *Hippolapathum*, Offic. Bastard Monks Rhubarb. This agrees in Virtues with the *Lapathum hortense latifolium*. This is what the Herb Women of *London* frequently sell for the true Monk's Rhubarb.

Lapathum hortense latifolium, C. B. P. *Rhabarbarum Monachorum*, Offic. *Hippolapathum sativum*, Ger. Monk's Rhubarb. It is planted in Gardens, and grows wild in several Parts of *France*, *Italy*, and *Germany*. A Dram of this powder'd with a Scruple of Ginger, and taken in a Morning fasting, in warm Broth, is good to purge off the yellow Bile and ferous Humours. The Juice of the Root, with Sulphur, cures the Itch, and with the Meal of Lupines, cures Pimples, Freckles, the *Albus*, and other cutaneous Disorders. The dry'd Powder taken in Wine, is said to expel the Stone from the urinary Passages; and taken with the Juice of Horehound, is good for the Jaundice.

Lapathum acutum, *Oxylapathum*, Offic. *Lapathum folio acuto, plano*, C. B. P. Sharp-pointed Dock. It grows in moist Places, and among Ruins and Rubbish. The Root and Seed are used. *Willis* recommends the Roots of this Dock in a Diet Drink, as a most excellent Antiscorbutic. And they are said by others to be effectual in a Jaundice, and to cleanse and purify the Blood, and are good for the Scurvy and Rheumatism, and all Manner of Scabby, Itchy Eruptions. The Seeds taken in Powder, corroborate the Liver, and stop all Sorts of Fluxes.

Lapathum folio acuto, crispo, C. B. P. *Lapathum, acutum crispum*, J. B. The Root of this Plant is very bitter, astringent, of a pale Yellow, giving a pretty deep Tincture of Red to blue Paper; its Leaves are fourish, giving the same Paper a lively Tincture of Red, which gives Reason to conjecture, that they contain more acid Salt. The Salt approaches that of Nitre; for it does not blacken the Tincture of Galls, any more than that of Sorrel. The Root of Dock is generally used at *Paris* in Broths, and aperitive Ptisans. The Root bruised is apply'd to Ulcers of the Legs, and is an Ingredient in Ointments for the Itch.

Lapathum sanguineum, Offic. *Lapathum folio acuto, rubente*, C. B. P. Bloodwort. It is cultivated in Gardens, flowering in *June*. The Leaves and Seeds are used. The Leaves taken in Broth, loosen the Belly; and the Seed powdered, and taken in any astringent Liquor, are recommended as effectual for stopping too profuse menstrual Discharges, and other uterine Fluxes.

Laserpitium, foliis latioribus, lobatis, Boerh. Ind. A. *Gentiana alba*, Offic. *Libanotis Theophrasti minor*, Ger. The lesser Herb Frankincense of *Theophrastus*. It grows on the Mountains of *Switzerland*, and

the *Pyrenees*, flowering in *July*. The Root is alexipharmic, and good in uterine Disorders.

Laserpitium Gallicum, C. B. Pin. *Laserpitium, e Regione Massiliæ allatum*, J. B. Laserwort. It is cultivated in Gardens, flowering in the Summer. The Root is used, which is heating, and good against Sugillations, stumous Swellings, Tubercles, Ischiadic Pains, and Excrescences about the Anus. It is said to repress venereal Inclinations.

Lathyrus, Offic. *Lathyrus latifolius*, C. B. P. *Clymenum Dioscoridis quibusdam*. Peas Everlasting, or Chichling Vetch. It grows in Woods and Thickets, flowering in the Summer. The express'd Juice of the whole Plant, together with the Root, being drank, is effectual against Vomiting of Blood, and the Celiac Passion, and to restrain Hæmorrhages of the Uterus, and from the Nose. The Leaves and Pods bruised, and applied to Wounds, promote their Cicatrization.

Lathyrus sylvestris, flore luteo, Park. Theat. *Lathyrus sylvestris luteus foliis Viciæ*, C. B. P. Everlasting Tare. This grows in Woods and Thickets, flowering in *June*. The Herb is reckon'd a good Astringent.

Lavendula, Offic. *Lavendula latifolia*, C. B. P. *Pseudo-Nardus, quæ vulgo Spica*, J. B. Greater Lavender. It is planted in Gardens, but is rarely met with in *England*. The Herb and Flowers are used, being of fine Parts, and friendly to the Head and Nerves. It is principally used in Catarrhs, Palsies, Convulsions, the Vertigo, Lethargy, and Trembling of the Limbs; it provokes Urine, the Menfes, and expels the Fœtus; and is good for the Gripes, proceeding from Flatulences. Outwardly it is of Service in *Lixivia*, for the Head and Members, and in Masticatories.

Lavendula angustifolia, C. B. P.
B b — Spica

Spica Lavendula vulgaris, Offic. *Pseudo Nardus quæ Lavendula vulgo*, J. B. Common Lavender, or Spike. This grows wild in the Southern Parts of *France* and *Spain*, but is cultivated with us in Gardens, flowering in *July*. It takes its Name à *Lavando*, Washing or Bathing, because it was used in Baths on Account of its Fragancy : It is, also, called *Spica*, Spike, because among all the verticillated Plants, this alone bears a Spike : Many call it *Nard*, and perhaps, this is the true *Nard* of the Antients, which we will not dispute, since we cannot arrive at any Certainty in the Matter. It is the principal of all the Cephalic Plants, being very comfortable and reviving, under Faintings ; whence it is very proper in Lethargies, Apoplexies, Palsies, and Epilepsies, and is recommended in Disorders incident to Virgins. The Plant is, also, an Emmenagogue, and a great Promoter of the Lochia, after the Birth. That Lavender is far more potent and penetrating, and of greater Efficacy, in cephalic, uterine, and nervous Disorders, than the Flowers of Rosemary, appears from the Oil of it distilled, and from the Salivation excited by the Leaves and Flowers in chewing ; whence it is much commended in soporific and catarrhus Disorders. Lavender given in a Phrensy, proceeding from an Inflammation, infallibly destroys the Patient ; but it is good for vertiginous old Persons, and Distempers owing to Dullness and Want of Spirits. It is outwardly used in warming and strengthening Fomentations.

Laurocerasus, Offic. Boerh. Ind. A. *Cerasus folio Laurino*, C. B. P. *Padus exotica folio amplo, crasso, sempervirenti*, Rupp. Flor. Jen. Laurel, or Cherry Bay. It has been customary to mix the Water distill'd from the Leaves of Laurel with Brandy

or other spirituous Liquors, in order to impart to them the Taste of *Ratafia* ; and it has been very common to use Laurel Leaves in Cookery in order to give the same Sort of Taste to Custards, and some Sorts of Sweetmeats. But some Years ago, some People at *Dublin* were manifestly poison'd by drinking Laurel-water ; and it has been since found by repeated Trials upon Dogs, that this Laurel-water is the most deleterious Poison perhaps known, killing almost in *Instanti*. There is a full Account of these Accidents and Experiments in the *Philosophical Transactions*, which the Curious may consult. It is said, that the Villainy of some Dealers in Medicine has been destructive to some People, by substituting the Water of Laurel, instead of that of black Cherries, on Account of the Resemblance in the Smell of each ; and this is not at all unlikely. Hence black Cherry-water has fell into some Disrepute, however innocent, for I am satisfy'd it is as harmless as any of the other Simple Waters, and may be used as safely, if Experiments made upon Animals with a View of discovering the Truth can be depended upon, provided it is only made of the usual Strength. The Berries of the *Laurocerasus* are esteem'd a good Antiscorbutic.

Laurus, Offic. *Laurus vulgaris*, C. B. P. *Laurus mas & femina*, Ger. The Common Bay Tree. It is planted in Gardens, flowering in *March* and *April*. The Leaves and Berries are used. They are heating, drying, emollient and revolvent. The Berries are principally used to provoke Urine, and the Menstrues, for Disorders of the Nerves, Palsy, and Colic, for Pains after Birth, and for Crudities of the Stomach. The Leaves are recommended for the Stinging of Wasps, to soften Tu-

mours, to provoke the Menfes, to mitigate Pains, and to give Relief in the Tooth-ach.

Laurus Alexandrina, Offic. *Laurus Alexandrina fructu folio infidente*, C. B. P. *Ruscus latifolius fructu folio infidente*, Boerh. Ind. Alt. Laurel of *Alexandria*. This grows in the Gardens of the Botanists. The Herb is used, which is esteem'd vulnerary and diuretic.

Laurus latifolia, Offic. *Platytera Dioscoridis*, C. B. P. *Laurus major*, *five latifolia*, Park. The broader-leaved Bay Tree. It grows in *Spain*. The Leaves are used which agree in Virtues with the common Bay Tree.

Laurus Tinus, Offic. *Laurus sylvestris Corni seminae foliis subhirsutis*, C. B. P. *Tinus prior Classi*, Boerh. Ind. Alt. Wild Bay. It is a Native of *Portugal*, flowering in *July* and *August*. The Berries are used, and taken internally purge by Stool, with great Disorder and Perturbation of the whole Body, and being held in the Mouth, soon burn the *Fauces*, and are sometimes given in the Dropsy with singular Success, being a very strong Cathartic. It is a very dangerous Medicine, and inflames the Intestines to a very great Degree; and indeed may more properly be call'd a deleterious Poison, however some People who have taken it, may have escap'd.

Lens, Offic. *Lens vulgaris*, C. B. *Lens major & minor*, Mer. Pin. Lentils. They are sown in Fields, flowering in *May*, and the Seed is ripe in *July*, which is the Part used. They dull the Eye Sight, are difficult of Digestion, incommode the Stomach, and generate Flatulencies, both in that Part, and the Intestines; They stop a Looseness, and are prejudicial to the Nerves, Lungs, and Head.

Lenticula palustris vulgaris, C. B. P. *Lens palustris*, Offic. *Lenticularia minor monorhiza foliis subretundis*

utrinque viridibus, Mich. Nov. Gen. Duck's Meat. This is found in watery Places. The whole Plant is used, which is of a cooling, mollifying Nature, and is recommended in Inflammations, the Gout, and St. Anthony's Fire, and is by some commended for the Jaundice.

Lentiscus, Offic. *Lentiscus ex Chio, ex qua suat Mastiche*, Ind. Med. Tourn. Itin. The Mastich Tree. It grows plentifully in the Island of *Scio* or *Chios*, in the *Archipelago*, flowering in *March* and *April*. The Parts used, are the nodous and brachiated small Branches, which are of the Thickness of a Man's Finger, white on the Inside, but cover'd with an Ash-colour'd Bark, and of a resinous Taste and Smell. The other Part in Use in Medicine, is the *Resina Mastiche*, Offic. Mastich. It is dry, transparent, and of a pale yellow Colour. It flows from an Incision made in the Bark of the abovemention'd Tree, and is brought to us in small, and almost pellucid Drops, and is of a resinous and astringent Taste, and of a fragrant Smell. That is to be esteem'd which is of a sweet Smell, bright, shining, dry, friable, and unadulterated. The Wood is drying and binding, good for all Sorts of Fluxes, and for a falling down of the Anus and Uterus; it is good to stop phagedenic Ulcers, to provoke Urine, and to fasten loose Teeth. The Gum is heating, drying, emollient, and a good Strengtheners of the Stomach; it stops Vomiting and Nauseas. It blunts and corrects the Acrimony of Cathartics, strengthens the Head, and the nervous system; and cures Coughs and Spitting of Blood.

Leontopetalon, Offic. Boerh. Ind. A. *Leontopetalon quorundam*, J. B. Black Turnep. It grows in *Apulia*, flowering pretty late in the Year; the Root is used which cures the Bites of Serpents. *Galen* ascribes a digestive,

gestive, heating, and drying Quality to it.

Leontopodium. This is already taken Notice of under the Article *Gnaphalium*.

Lepidium, *Piperitis*, Offic. *Lepidium latifolium*, C. B. P. *Rapbanus sylvestris* Officinarum, *Lepidium Æginetæ* Lobelio, Ger. Emac. Dittander. It grows in moist Places near Rivers, flowering in *June* and *July*. The Leaves are used, which are esteem'd good for the Sciatica, and being chew'd they cause a great deal of Rheum to come from the Mouth, and are therefore recommended for scrophulous Tumors in the Throat. The *Suffolk* Women give them to hasten the Birth boild in Ale.

Leucanthemum vulgare, Boerh. Ind. A. *Bellis major*, Offic. *Bellis sylvestris caule folioso major*, C. B. Ox Eye Daisy. It grows in Fields and Meadows, flowering in *May*. The Leaves and Flowers are used. A Decoction of the whole Plant being drank is recommended as a singular Remedy for an Asthma, Phthisis, and Orthopnea. They are also good for Wounds and Ruptures.

Leucas montana, Offic. *Lamium luteum*, Ger. Emac. *Galeopsis sive urtica iners flore luteo*, J. B. Yellow Archangel. It grows in Woods and Thickets, flowering in *May*, and is said to resist the Poison of venomous Animals, particularly those of the Sea Kind.

Leucoium album, Offic. Ger. Emac. *Leucoium incanum majus*, C. B. P. Stock-gilly-flower. It grows in Gardens, flowering in Summer. The Flowers are used, which are recommended by *Dioscorides*, for Ulcers and Chaps in the Fundament, and Inflammations of the Matrix. *Galen* affirms, that they provoke the Menfes and hasten Birth.

Leucoium luteum, Cheyri, Offic. *Leucoium luteum vulgare*, C. B. P. *Keyri sive Leucoium vulgare luteum*,

Park. Theat. *Viola lutea*, Ger. Emac. Wall Flower. It grows upon old Walls and Buildings, flowering in *June*. The Flowers are used, which are esteem'd cordial, good to mitigate Pains, provoke the Menfes, and to expel the Secundines, and give Relief under the Palsy and Apoplexy. There is scarce a more effectual Remedy known, than the Wall Flower, taken twice every Day in warm Beer for the Jaundice.

Levisticum, Offic. *Ligusticum vulgare*, C. B. P. *Levisticum vulgare*, Ger. Emac. Lovage. It is cultivated in Gardens, flowering in *June*. The Roots, Leaves and Seeds are used; and in every Respect, agrees as to Virtues with Angelica and Masterwort. It is alexipharmic, diuretic, and vulnerary.

Libanotis, Offic. *Libanotis Ferulæ folio sive Cachryfera*, sive *Cachrys vera*, Park. Theat. Fennel Herb Frankincense. It grows on the Mountains of *Italy* and *Sicily*, flowering in *May*. The Root and Seed are used, which are by some of the Ancients recommended for their heating and drying Qualities, and are said to be good for the Epilepsy.

Lichen, *Hepatica vulgaris*, Offic. *Lichen petræus cauliculo pileolum sustinente*, Boerh. Ind. A. Liverwort. It grows in moist and shady Places, and by the Banks of Rivers. The whole Plant is used, which is an extraordinary Hepatic, and is principally used in Obstructions of the Liver and Bladder; whence it becomes of Service in hectic Disorders, the Jaundice, the Itch, Lichen, Gonorrhæa, and Fevers, outwardly applied, it stops Hæmorrhages in Wounds.

Lichen Arboreus pullus, Offic. *Lichen crustæ modo arboribus adcrescens pullus*, Boerh. Ind. A. Tree Liverwort. It grows to Trees. The whole Plant is used instead of the *Muscus Pulmonarius*.

Lichen cinereus, Offic. *Lichen cinereus terrestris*, Raii. *Lichen pulmonarius*, *saxatilis digitatus major cinereus*, Boerh. Ind. Alt. Ground Liverwort. It is found upon dry barren Places. The whole Plant is used being accounted a Specific against the Bite of a Mad Dog, given with Pepper; but Experience convinces us, that many Dogs and some Men have dy'd after taking it in due Time, and with all imaginable Regularity.

Lichen petræus stellatus, C. B. P. *Hepatica stellata*, Offic. *Lichen five Hepatica vulgaris*, Park. Star Liverwort. It grows in moist and shady Places. The whole Plant is used, which agrees in Virtue with the common Liverwort. This is more in Use among the common People, than among the Physicians.

Lignum Aloes. This is already taken Notice of under *Agallochum*.

Lignum Aquilæ, Ind. Med. Eagle Wood. It is used in the Shops at Paris instead of the following.

Lignum Aspalathum, Pharmacop. *Aspalathum*, Offic. Geoff. Tract. *Agallochum præstantissimum*, C. B. P. Calambac Wood. This Wood is brought from the East Indies in Pieces thicker and less solid than the *Lignum Aloes*, of a paler Colour, and fainter Smell, bituminous, fat and resinous, and of a bitterish Taste. It agrees in Virtues with the Log *Agallochum*, for which it is often sold, but it is weaker.

Lignum Campefanum, Offic. J. B. *Tsam Pangam*. Hort. Mal. Log-Wood. It grows in the East and West-Indies, and the Wood is used, which is esteem'd astringent, good to fortify the Stomach, and is much celebrated of late for its Virtues in curing a Dysentery.

Lignum Carabaccium, Bagliv. de Fibra Motric. This Wood has the Taste of Cloves, but very mild, and quite grateful, and is of a Colour very much resembling that of Cinna-

mon. It is imported from India, but is as yet unknown in our Shops. Bagliv. affirms, that he very successfully prescrib'd a warm Potion of the Decoction of this Wood for correcting the Acrimony of the Lymph.

Lignum Cedrinum. This is already taken Notice of under the Article *Juniperis*.

Lignum Colubrinum, Snake Wood. This Wood is said to grow in Ceylon and Timor. The Root is woody, and as thick as a Man's Arm, with a dark colour'd Bark mark'd with Ash-colour'd Spots; the Wood underneath is solid, ponderous, of an acrid bitter Taste, but no Smell. It is said to be hot, dry, and abstergent, and to cure the Bites of Serpents. It operates by Stool, and sometimes by Vomit; and is by some recommended in Tertians, and Quartans, and for the Worms. But it is more generally agreed, that this Wood has a virulent, and malignant Quality; and that it is so extremely narcotic, as to induce a Tremor and Stupidity.

Lignum Moluccense. This is already taken Notice of under the Article *Grana Tiglia*.

Lignum Nephriticum. This is already mention'd under *Glans Unguentaria*.

Lignum Pavanum. This is a Name for the Sassafras Wood.

Lignum Rhodium. This is specify'd under *Aspalatus*.

Lignum Sanctum, is *Guaiacum*.

Ligusticum, is the *Levisticum*.

Ligustrum, Offic. Ger. Emac. *Ligustrum Germanicum*, C. B. P. Privet. It grows in Hedges, flowering all the Summer. The Leaves and Flowers are used, which are cooling, drying, astringent, and inciding, and good for Inflammations, Putrefactions and Exulcerations of the Mouth and Fauces, and for a Relaxation of the Uvula, and Bleeding of the Gums.

Lilium album, Offic. Ger. Emac. *Lilium album vulgare*, J. B. White Lilly. It is sown in Gardens, flowering in June. The Root, Seed, and Flowers are used. The Root is seldom internally used, but often applied for softening and ripening of Tumors, for removing Corns of the Feet, being mixed with old Lard, for mollifying the *Pudenda* in Labour, and for Burns, and the like Cases. The Seeds exhibited in Vervain-water are good to facilitate the Birth. The Flowers are emollient, suppling, and anodyne.

Lilium rubrum, Mont. Ind. *Hemerocallis*, Offic. *Lilium aureum*, Ger. Emac. *Lilium purpureo croceum majus*, C. B. P. Red Lilly. It is cultivated in Gardens, flowering in June and July. The Roots and Leaves are used. The Root drank, or made into a Pessary with Honey and Wool, expels Water and Blood. The Leaves bruised mitigate Inflammations of the Breasts, contracted after Child-birth, and Inflammations of the Eyes. The Root and Leaves are successfully applied by Way of Cataplasm to Burns.

Lilium montanum minus, Ger. Emac. *Martagon*, Offic. *Lilium floribus reflexis*, *montanum*, C. B. P. *Martagon*, or *Turks Cap*. It is cultivated in Gardens, flowering in June. The Root which is used, is substituted, in our Shops, in the Room of the Yellow Asphodel. The common People hang it about the Necks of Infants, to facilitate Dentition.

Lilium Convallium, Offic. *Lilium Convallium flore albo*, Park. Lilly of the Valley. It is found in Woods and shady Places, flowering in May. The Flowers are used, which are esteem'd cephalic; and are principally used in cold Disorders of the Head, as the Apoplexy, Palsy, Vertigo, Epilepsy, and in fainting Fits.

Limonia malus, Offic. Park. *Theat. Malus Limonia acida*, C. B. P. *Li-*

mon vulgaris, Tourn. Inst. The Lemon Tree. It grows in *Italy* and *Spain*. The Fruit is used, which is cooling, and grateful to the Stomach, allaying Thirst, and promoting an Appetite, and is good for both common, malignant and pestilential Fevers. Lemons provoke Urine, and the Juice being mixed with Salt of Wormwood stops Vomiting, and strengthens the Stomach. Of late Years, the Juice of Lemons, perfectly neutralized with Salt of Wormwood, has been very much given in Fevers, and with very good Effect, in the Quantity of about half an Ounce, repeated at due Intervals.

Limonium, Sea Lavender. This is already taken Notice of under the Article *Behen rubrum*.

Linaria, Offic. *Linaria lutea vulgaris*, Ger. Emac. *Linaria vulgaris lutea, flore majore*, C. B. P. Toad-Flax. It grows upon Banks and Hedges, flowering in June and July. The Herb is used, which is diuretic, and is principally used in the Jaundice, Dropsy, Obstructions of the Liver, and in a Difficulty of Urine. It is accounted an excellent Remedy for the Piles; and an Ointment made of it is used with Success externally in the same Complaints.

Linaria, *Cymbalaria dicta*, Rail Hist. *Cymbalaria*, Offic. *Linaria hederaceo folio glabro, seu Cymbalaria vulgaris*, Tourn. Inst. Ivy-leaved Toad Flax. It is found about old Walls and Quarries. The Herb is used, which is of an astringent Nature, and in *Italy* this Herb is used in the Room of the *Umbilicus Veneris*, and is said to have the same medicinal Virtues ascrib'd to it.

Lingua Cervina, *Phyllitis*, Offic. *Phyllitis sive Lingua Cervina vulgaris*, Park. Harts Tongue. It grows in shady Places, and among Stone Buildings. The Leaves are used, and are principally recommended in a tumi-

tumified Spleen, and for a Spitting of Blood. Externally apply'd it cleanses Wounds and Ulcers. Exhibited in Powder, it is good for the Palpitation of the Heart, for a Suffocation of the Uterus, and for Convulsive Motions. Boiled in Wine it is good for the Bite of a mad Dog, and Obstructions of the Viscera. It is also given in the Rickets and to scorbutic Habits.

Linum, Offic. *Linum sativum*, C. B. P. Flax. It is sown in Fields, flowering in *June*. The Seed is used, which is usually called Linseed, and is digesting, emollient, and ripening, and is principally recommended in Coughs, Pleurifies and Consumptions. Externally apply'd it ripens Tumors, mitigates Pains, and expels the Fœtus. Flax infused in Water, as in Ponds or Rivers, as it is practised in order to rot the Stem, and procure the Bark for mechanical Uses, communicates to the Water a very poisonous Nature, insomuch that Cattle, which drink of it die; and the Fish in such Waters, are poison'd. The Seed of this Plant, afford an excellent Medicine, since from them is expressed an Oil, which is anodyne, demulcent, and extremely adapted to all Manner of Asperities; it relaxes, and involves Acidities, whence it is of extraordinary Service in the most desperate Colics. The stiff and rigid Limbs, being anointed with this Oil, are relaxed and render'd flexible. This Oil, when fresh drawn, and taken at the Mouth, is very good in a Pleurisy, and a Cough, to help Expectoration; and, injected in Clysters, is very proper in the Hæmorrhoids, and indurated Fœces, whence proceeds the Colic; mixed with sealed and Japan Earth, it is a great Arcanum in the Dysentery, and is a very good Remedy in the Stone: This Oil boiled with Honey, clears the Skin and Face of Spots, and all cutaneous Blemishes.

Linum Catharticum, Offic. *Linum sylvestre Catharticum*, Ger. Emac. *Linum pratense flosculis exiguis*, C. B. P. Purging Flax or Mill Mountain. It grows upon dry, hilly and chalky Places, flowering in *June* and *July*. The Herb is used, which is possess'd of a Cathartic Quality. It cures Tertians, and is recommended in the Gout. I once knew an Instance of a Man, who took a Purge from a Quack, of an Infusion of this Plant; which in a few Hours, swell'd him to such a Degree, that his ordinary Cloaths were not by much sufficient to cover him; and it was with some Difficulty, that he was recovered by more gentle Evacuations.

Liquid-Ambar, Offic. C. B. P. *Xochiocotzo Quahuil*, seu *Arbor Liquid-Ambarum Indicum*, Hern. *Styrax Aceris folio*, Raii Hist. *Platanus Virginiana Styracem fundens*. Herm. Par. Bad. Prod. Liquid Ambar. It grows in *Virginia*, *New-Spain*, and other Places in the *West-Indies*. The Part used is the Refin, which is a fat Liquid Substance, of the Consistence of Venice Turpentine, Yellow, inclining to Red, of an acrimonious Taste, aromatic and fragrant. It heats and moistens, resolves and opens Obstructions; and is an Emollient and Ripener. Its principal Use is in Obstructions and Hardness of the Womb, in hard Tumours, &c. It is employ'd in Suffumigations, and the like. *Hernander* says, that this Balsam distils from a Tree, either spontaneously, or from a Wound. Some break up the Branches into small Bits, and boiling them, skim off the Oil that rises on the Liquor, which they sell for the true Balsam; and this Liquor is thought by some to be the liquid Storax commonly sold by the Apothecaries and Druggists.

Liquiritia, Liquorice. This is already taken Notice of under the Article *Glycyrrhiza*.

Lithospermum five Milium Solis, Offic. *Lithospermum vulgare minus*, Park. Theat. Gromwell. It grows in Fields and by the Path ways, flowering in May and June. The Herb and Seeds are used. It expels the Stone, cleanses the Kidneys, and provokes Urine. Boil'd in Wine or Water it is of Service in a Gonorrhoea. The Plant gives hardly any Tincture of red to the blue Paper; the Fruit stains it a little.

Lolium, Offic. *Lolium album*, Ger. Emac. *Gramen Loliaceum Spica longiore*, C. B. P. Darnel. It grows among Corn. The Seed is used, which is heating, drying, attenuating, discussing and cleansing. Darnel mix'd with Malt promotes Drunkenness. It hurts the Eyes, and creates a Dimness, by the acrid Vapours it elevates to the Brain. *Hippocrates* recommends bruised Darnel in Uterine Disorders, in form of a Fomentation.

Lolium rubrum, Ger. Emac. *Phænix*, Offic. *Gramen Loliaceum folio & Spica angustiore*, Tourn. Inf. Ray Grass, Darnel Grass. It grows in Pastures, and by Path Ways, it is astringent and drying; stops a Looseness and the Menstrues; and restrains the Urine. It is sown in some Places as Food for Cattle.

Lonchitis, Offic. *Lonchitis altera foliis Polypodii*, J. B. *Polypodium angustifolium folio vario*, Boerh. Ind. Alt. Rough Spleenwort. This Plant grows in moist Woods, rough, and uncultivated Places. The Herb is good to agglutinate Wounds without suffering an Inflammation to come on. Drank in Vinegar it consumes the Spleen. The Root is aperient and diuretic.

Lotus Hæmorrhoidalis, Park. Theat. *Trifolium Hæmorrhoidale*, Offic. *Lotus Pentaphyllos siliquosus villosus*, C. B. P. Pile Trefoil. It grows in Sicily and France. The Seed is used which is recommended in the Hemorrhoids,

Lotus corniculata, Ind. Med. *Lotus five Melilotus pentaphyllos minor glabra*. C. B. P. *Trifolium siliquosum minus*, Ger. Emac. Birds-foot Trefoil. It grows in Pastures, flowering in June. The Herb is used which is esteem'd anodyne, emollient, maturing and good for Burns.

Lotus urbana, *Trifolium odoratum*, Offic. *Lotus hortensis odora*, C. B. P. *Melilotus major, odorata, violacea*. Boerh. Ind. Alt. Sweet Trefoil. It is sown in Gardens, flowering in June. The Herb and Seed is used. It is alexipharmic, anodyne, diuretic, and Vulnerary.

Lujula. A Name for the *Acetosella*, or Wood-Sorrel.

Lunaria, Offic. *Lunaria minor*, Ger. Emac. *Osmunda foliis lunatis*, Boerh. Ind. Alt. Moon-wort. It grows on hilly Places. The whole Plant is used, which agrees in Virtues with the *Ophioglossum*. The People in Wales apply an Ointment of this Plant, to the Reins, which they esteem as a certain Remedy for a Dysentery. It stops the Menstrues, and suppresses a Fluor Albus.

Lupinus, Offic. *Lupinus sativus, flore albo*, C. B. P. Lupines. It is sown in Gardens, flowering in June. The Seed is used, which ground to a Meal, affords a good Food, and is emollient, nutritive and anodyne, but internally taken, it binds the Belly; for which Reason it is given with a little Muscadine, in the worst Dysenteries. Lupines bring down the Menstrues, and expel the Fœtus. Externally us'd they are of Service in Achors, Pustules, Gangrenes and and malignant Ulcers.

Lupinus sylvestris, Offic. *Lupinus sylvestris flore cæruleo*, C. B. P. Wild Lupines. It is sown in Gardens, flowering in July. The Seeds are used, which agree in Virtues with the Former.

Lupulus, Offic. *Lupulus mas & fœmina*, C. B. P. *Lupus salictarius*, Ger.

Ger. Emac. Hops. They grow in Hedges, flowering in *July* and *August*. The Leaves, Flowers, and Tendrils are used. The Flowers are of a bitter Taste, and are esteem'd anodyne and discutient. *Hops* are principally used in Obstructions of the Liver and Spleen, they cure a Jaundice, are recommended in Hypochondriacal Disorders, and provoke Urine and the Menfes. Externally used they assuage Pains, and are serviceable in Contusions, Luxations, and Tumours. The Tendrils are good to purify the Blood, and are recommended for the Itch, but an excessive Use of them creates a great Pain in making Water. The Herb is reckon'd a good Epithem in intermittent Fevers, being apply'd to such Parts of the Body where the Vessels are most expos'd.

Luteola, Ger. Emac. *Struthium*, Offic. *Luteola Herba Salicis folio*, C. B. P. Dyers Weed. It grows upon Walls and ruin'd Places, flowering in Summer. The Herb is used, which is sown principally for Dyers Use, to dye of a Yellow Colour, tho' it is by some accounted a good Vulnerary, and of Use against the Jaundice. It is frequently sold by the Herb Women for *Glasum*, or Woad.

Lychnis coronaria, Offic. J. B. *Lychnis coronaria Dioscoridis sativa*, C. B. P. *Lychnis coronaria vulgaris*, Park. Theat. Rose Campion. It is cultivated in Gardens, flowering in *June*, the Seed is used, which purges Bile by Stool, and heals the Sting of the Scorpion.

Lychnis sylvestris, Offic. *Lychnis sylvestris sive aquatica purpurea simplex*, C. B. P. *Ocymoides purpureum multis*, J. B. Red Wild Campion. It grows by Hedges, flowering in Summer. The Seed is used which agrees in Virtues with the former.

Lycium, Offic. *Lycium Buxi foliis*, C. B. P. *Lycium sive Pyracantha*, Ger. Emac. *Lycium Italicum*, J. B. Box Thorn. It grows in hot Coun-

tries. The Nob or concreted Juice of the Leaves and Branches are used, the Preparation of which is as follows. The Branches with the small Roots are bruised, and being macerated for many Days, are boil'd; then the Wood being thrown away, the Liquor is again boiled to the Consistence of Honey. *Lycium* is adulterated by putting *Amurca*, or the Juice of Wormwood, or Ox Gall, into the boiling Liquor. In the same manner is *Lycium* prepared of the expressed and insolated Seed. The best *Lycium* is what will burn, and, when quenched, shews a red Spume; is black on the outside; but, when broken, red within, which has nothing of a rank Smell, but a bitterish astringent Taste, and is of the Colour of Saffron. It is of an astringent Quality, and deterges whatever darkens the Pupil of the Eye, and cures the Ulcerations, Itchings, and inveterate Rheums, affecting the Eyelids. It is effectual, also, in Purulencies of the Ears, in Exulcerations of the Gums, and Tonsils, Tissues of the Lips, or *Rhagades* of the Anus, and Abrasions, the affected Parts being anointed therewith. Exhibited either in Potion, or by way of Clyster, it is very proper for the Cæliac Passions, and the Dysentery. For an *Hæmoptoe* or Cough, it is given in Water; and to those who are bit by a mad Dog, it is prescrib'd to be swallowed in Pills or drank in Water. It renders the Hair yellow, cures a *Paronychia*, *Herpes*, and putrid Ulcers; applied in a Pessary, it stops the Menstrual Flux; and drank in Milk, or taken in Pills, it relieves those who are bitten by mad Animals. There are two Species of *Lycium* mentioned by *Dioscorides*; one is produced from a Plant growing in Greece, which is our present Subject, and is called simply *Lycium*; the other is prepared of an Indian Plant which is the following. But since the *Lycium* is unknown to the Moderns, there

are different Opinions about it. The Shops, as *Schröder* writes, commonly make their *Lycium* of the Berries of the *Periclymenum*, or *Honeysuckles*, others of the Fruit of *Ligustrum*, or *Privet*, and others of wild *Plums*. But they might have provided a better *Succedaneum*, as *Caspar Bauhine* or *Matthioli* observes, from the *Oxyacantha*, or the *Rhamnus*.

Lycium Indicum, Offic. *Lycium Garciae* sive *Cate*, J. B. *Lycium foliis Ericæ*, C. B. P. *Arbor spinosa*, unde *Cate* sive *Lycium exprimitur*, Bont. Indian Thorn. It grows in the *East Indies*. The inspissated Juice is used, which is called *Cate*, and which strengthens and fastens the Teeth and Gums. Whether the *Cate* of *Bontinus*, and the *Terra Saponica*, or *Catechu*, be the same, is not easy for the Learned to determine. From the Nearness of the Name *Cate* and *Catechu*, I am inclined to think they are the same thing. But since *Helbigius* affirms, that the *Catechu* is taken from that Tree, whose Fruit the Natives eat with Lime and Betle, which, *Bontinus* assures us, is the Fruit of the *Areca* or *Faüfel*, I cannot (says *Dale*) but give Credit to so great a Man, especially, considering he lived many Years in that Country. And since there is so great a Variety, both in the Colour and Weight of *Terra Japonica*, I don't see why they may not be the Product of different Plants, tho' called by the same Name.

Lycoperdon. A Species of Mushroom. See the Article *Fungus*.

Lycopersicon. A Name for the *Amaris Pomum*.

Lycopodium, Offic. *Muscus terrestris repens sive clavatus*, C. B. P. *Plicaria* & *Cingularia*, Polonis. Club Moss. It grows on Heaths and hilly Places, flowering in *July* and *August*. The whole Plant is used, and the Flower or yellow Powder of the Clubs. It refrigerates and dries; its principal Use is in expelling the

Stone, and in Fluxes of the Belly. Outwardly it is of Service in fastening loose Teeth, and in drying and consolidating Wounds; and in extirpating the *Plica Polonica*. The Flower is very serviceable in the Epilepsy of Children, and in the Heart-burn, and flatulent Gripes, with which they may be affected. It is also recommended in pulmonary Disorders. The Country-women in the *Ukraine*, when labouring under an excessive Flux of the Menfes, with Pains and Strangulations of the Uterus, prepare a Girdle of it, which they wear next their Skin; and bind it about their Heads as a Diadem, to repress an Hæmorrhage from the Nostrils.

Lycopsis. Wall Bugloss. This is already specify'd under *Echium*.

Lycopus, Offic. *Lycopus palustris glaber*, Boerh. Ind. Alt. *Marrubium aquaticum*, Ger. *Marrubium palustre glabrum*, C. B. P. Water Horehound. It grows in watery Places, flowering in *July*. The Plant is used, which is ranked in the Class of Astringents.

Lyfimachia, Offic. *Lyfimachia lutea major*, quæ *Dioscoridis*, C. B. P. *Blattaria spuria altera lutea*, Volck. Flor. Nor. Yellow Willow Herb. This Plant is called *Lyfimachia* from *Lyfimachus* the Son of a King of *Sicily*, who is said to be the first who discovered it. It grows by River Sides, flowering in *June*. The Herb is used, which is vulnerary, and is said by some to be possess'd of an astringent Quality, tho' it is seldom used.

Lyfimachia purpurea, *Salicaria*, Mont. Ind. *Salicaria vulgaris purpurea foliis oblongis*, Boerh. Ind. Alt. *Lyfimachia spicata purpurea forte Plinii*, C. B. P. Spiked Willow Herb. It grows in marshy Places, and by the Banks of Rivers, flowering in *July*. The Herb is used, which is an Ophthalmic. The distill'd Water is a present Remedy for Wounds, Punc-

Punctures and Sugillations of the Eyes, as well as Dimness of Sight, and all other Infirmities incident to those Parts. It is a Specific in Inflammations, and a Decoction of the Herb is an excellent Remedy for the epidemic Diarrhæa of Ireland.

MACER, Diosc. Theoph. *Macer Veterum*, C. B. P. *Macer Dioscoridis & Græcorum*, J. B. The Grecian Macer. It is brought from *Barbary*; the Bark is used, which is of an astringent Taste, and is recommended by *Dioscorides* as good for Spitting of Blood, the Dysentery and Fluxes.

Matis, Mace. See the Article *Nux Moschata*.

Majorana, *Amaracus*, *Sampsuchum*, Offic. *Majorana vulgaris*, C. B. P. Sweet Marjoram. It grows in Gardens, flowering in *July*. The Herb and Seed are used. It is cephalic and uterine, and principally used in Disorders of the Head and Nerves, as well as of the Uterus and Stomach. It provokes the Menfes, used in a Pessary; comforts the Brain, and discusses Flatulencies, that molest it. Dr. *Nicholas Chesneau* of *Marseilles*, commends the following Errhine, in the Head-ach: Take of the Root of white Hellebore, half a Dram; of the Leaves of Sweet Marjoram, two Pugils; boil them in six Ounces of Water, to the Consumption of a third Part. When you use it, fill your Mouth with Water, and putting some of the Decoction, a little warm, in the Hollow of your Hand, draw it up your Nostrils, when the Pain is very violent, for it exasperates a slight one. The Water of Sweet Marjoram helps a Catarrh, if, instead of an Errhine, you fill your Mouth with Wine, or pure Water, and taking some of the Water of the Herb in the Hollow of your Hand, you stop one Nostril, and draw it up the other as far as the Root of the Nose, or the *Os Ethmoides*. If

you don't take this Method, the Errhine will not ascend to the aforesaid Place, but will be diverted and drawn back upon the *Fauces*, or *Narium Foramina*. This Errhine (says *Simon Pauli*), my Father used with the highest Reputation in the Case of Prince *Walenstein*, who was afflicted with a Rheum. If the Sides of the Nostrils, or the Space between the Eyebrows, be anointed with the Balsam of this Plant, it has a wonderful Effect in a Catarrh, or rather a Rheum. The Nape of the Neck and the Temples, are usually anointed with the same Balsam, not only in the aforesaid Disorder, but in other cold Distempers of the Head. Being chew'd or apply'd, it eases the Tooth Ach.

Majorana Oleracea, Offic. *Majorana hortensis viridis*, *tenuior*, C. B. P. Pot Marjoram. It is cultivated in Gardens among other Culinary Herbs, flowering in Summer, and agrees in Virtues with the following.

Majorana Sylvestris, Park. Theat. *Origanum*, Offic. *Origanum sylvestre*, *Canila bubula Plinii*, C. B. P. Wild Marjoram. It grows in Hedges and Thickets, flowering in *July*; the Herb is used, which is opening and absterfve, and principally in Obstructions of the Lungs, Liver and Uterus. It is of great Service in a Cough, Asthma, and Jaundice. It increaseth Milk, and expels ichorous Excrements by Sweat. Externally used, it is frequently put in Baths for the Head and Uterus, and for the whole Body, under the Itch.

Majorana tenuifolia, C. B. P. *Majorana tenuior & lignosior*, J. B. Marjoram Gentle, or Perennial. It grows in Gardens, and the Herb is used, which agrees in Virtue with Sweet Marjoram.

Malabathrum, Park. Theat. *Malabathrum & Folium Indum Officinarium*, J. B. *Tamalapatra*, Ger. Emac. *Cinna*.

Cinnamomum seu Cassia crassior, Pseudo-Cassia, C. B. P. Indian Leaves. This is the Leaf of a kind of wild Cinnamon Tree, brought us from Malabar, and other Places of the East-Indies, These Leaves are distinguish'd from the true Cinnamon Leaves, by their being less aromatic. They agree in Virtues with Spikenard, particularly in powerfully provoking Urine, and correcting a Fætor of the Mouth.

Malicorium. The Peel of the Pomogranate is so call'd.

Malva, Offic. *Malva vulgaris flore majore, folio sinuato*, J. B. Common Mallows. It grows by way sides, flowering in June. The Root, Leaves, and Seed are used. The Mallow is loosening, cooling, and mollifying, it being one of the five Emollient Herbs. It mitigates Pains, and allays the Sharpness of Urine. The Herb is a proper Remedy, first, where excessive Acrimony requires Demulcents; secondly, where too great a Stricture requires Relaxation; thirdly, where Pains are to be mitigated; and fourthly under an excessive Glutinosity. Hence it is effectual for dry and rigid Fibres; for rendering the hard Intestines lubricous; and for the Vertigo in those who labour under Hypochondriacal Disorders. The Surgeons also make great Use of this Plant, and there is scarce a Cataplasma design'd for maturing, but has Mallows for an Ingredient: It is of Efficacy in Affections of the Lungs and Intestines, a Phthisis, Hoarseness and Cough. The Flowers are good for Inflammations of the Gums and Uvula; a Cataplasma of the Herb is commended for the Erysipelas, and an Infusion of the Leaves after the manner of Tea, cures an inveterate Heat of Urine.

Malva minor, Offic. *Malva sylvestris pumila*, Ger. Emac. *Malva sylvestris folio rotundo*, C. B. P. Small, Wild, or Dwarf Mallow. It flowers

in June, and the Leaves are used which agree in Virtues with the preceding.

Malva crispa, Offic. *Malva foliis crispis*, C. B. P. French Mallows. It is sown in Gardens, flowering in June; the Leaves are used, which agree in Virtues with the other Species of Mallows.

Malva arborea, Offic. *Malva rosea folio subrotundo*, C. B. P. *Malva rosea sive hortensis*; J. B. Holly-hocks. It grows in Gardens, flowering in June; The Leaves and Flowers are used, which are mollifying, but in a lesser Degree than the common Mallows. It is principally used in Disorders of the Tonfils, and for a profuse menstrual Flux.

Malva arborea maritima, Offic. *Malva arborea marina nostras*, Park. Theat. Sea Mallow Trees. It grows in Gardens, flowering in June, and the Leaves are used, which agree in Virtues with those of the other Mallows.

Malus, Offic. *Malus sive Pomum*, C. B. P. Tho' Apple Tree. It is cultivated in Gardens and Orchards, flowering in April. Tho' Apples may be hurtful to a cold and humid Stomach, they are very agreeable to a hot and bilious one; and render the Body soluble. Almost all Apples have a Property in common, that, if their expressed Juice be drank with a little Saffron, it become an Antidote against Poisons, and expels Worms, or other Animals, from the Belly. A Cataplasma prepared of sweet Apples is very much recommended for pungent Pains in the Sides, and for Ambustions by Gun powder. There is a Medicine, which frequently occurs in our Practice, which is a Poultrice prepared of Apples, and apply'd to an Inflammation of the Eyes, and it is common, to apply a putrid Apple to all sorts of Tumours and Inflammations of the Eyes. Gesner with good

good Success, advis'd a roasted Apple open'd, and fill'd with a Dram of Frankincense for a *Dyspnœa*, and other Disorders of the Lungs.

Malus Insana, Offic. *Malum Insanum folio non spinoso Solanum pomiferum fructu oblongo*, C. B. P. Mad Apples. It is cultivated in Gardens, flowering in the Summer. The Fruit is used. It induces a *Sopor* and Madness, whence it takes its Name, but is used in Sauces and Sweetmeats by the *Italians* and *Spaniards*.

Malus Sylvestris, Offic. *Mala sylvestria quæ & albâ, & rubra, & majora, & minora*, C. B. P. Crab Tree, or Wilding. It grows in Woods and Hedges, flowering in *April*. Its Fruits and Juice are the *Agresta* of the Shops, called *Verjuice*, it is vehemently austere, acid, and astringent, and an excellent Application for Strains.

Mandragora, Offic. *Mandragora, fructu roundo*, C. B. P. Mandrake. This is cultivated in Botanic Gardens, flowering in *May*. The Leaves, the Bark of the Root, and the Fruit are us'd. The Leaves are sharp-pointed, about a Cubit long, and a Palm and a half broad, of a dark green Colour and fetid Smell. The Bark of the Root is of a deep Ash Colour, white within and rough without, and of a disagreeable Smell. The whole Plant is esteem'd soporific and narcotic, and according to some of a poisonous Nature, tho' others say that the Fruit may be eaten without any ill Consequence. It is however seldom used internally; but externally the Juice is recommended against Pain, and Redness of the Eyes, an Erysipelas, hard Tumors and strumous and scrophulous Swellings. The Herb-women in *London* generally sell the Leaves of the *Hyoscyamus luteus*, for those of *Mandrake*, and these or those of *English Tobacco*, are said to be usually employ'd in

making the *Unguentum Populneum* instead of those of *Mandrake*.

Manga, Offic. *Mangas. Park. Theat.* The Mango Tree. This grows in the *East Indies*, and the Fruit is brought to us pickled, which is esteem'd to be cooling and moistening. According to *Garcias*, the Stones roasted cure a *Diarrhœa*.

Manna. This is produced from the *Mannifera Arbor*, Offic. *Fraxinus rotundiore folio*, C. B. P. The round-leav'd Ash, and is certainly a Juice flowing from the Trunk and larger Branches of this Tree, as is said, when the Sun enters the Sign *Cancer*. This Juice is every Year collected in hot and dry Weather, about, or a little before the Dog Days, and the *August* Rains, because, when rainy Weather begins, it ceases to flow: There are three Kinds of this *Calabrian* Manna, one by the *Italians* called *Manna di Carpo*, which is the most elegant of all the others; and is either spontaneously discharged from the Trunk, and large Branches of the Tree, in form of a Crystalline Liquor, and becomes concreted into Grains, some larger, and some smaller, which are, the succeeding Day, carefully gather'd, lest they should be again melted by the Rains, or the Fogs; or about the Rising of the Sun the Bark of the Tree is divided with a Knife, and the discharg'd Liquor is receiv'd in Vessels, put upon Paper, and expos'd to the Sun, in order to be dried: The second Species, by them called *Forcata*, which is obtain'd by Art, is, by the same Trees, after they cease to drop spontaneously, yielded in the Month of *August*, from Incisions made in the Bark to the Wood. From these Incisions, the Manna flows copiously from Noon till ten o'Clock at Night, and is next Day expos'd to the Sun in order to be dried; but this Species is less esteem'd, on account of its Impurity and Yellow Colour: The third

third Species is called *Manna di Fronti*, and is spontaneously, by way of Sweat, discharged from the Leaves of the Trees, on which the Drops are indurated; but, this last Species is not very carefully collected, because it is not, without the greatest Difficulty, to be separated from the Leaves. The *Arabians* are the first, who give us any Account, of *Manna* as a Cathartick which they call *Terebinthin*, *Siracost*, and *Mel de Cusuram*. *Manna* is not only purgative, but, also, possessed of a correcting and temperating Quality, and therefore it is justly to be accounted a Medicine of all others the most mild, safe, and friendly to Nature; for though, especially when exhibited in large Doses, it powerfully purges the *Primæ Viæ* from all *Sordes*, and, in some Patients, procures, perhaps, twenty Stools, when three or more Ounces of it are taken; yet so wonderful and salutary are its Virtues, that it expeditiously produces its Effects, without bringing on violent Pain, Loss of Strength, Ebullition of the Blood, an Augmentation of the Thirst and Pulse, or a preternatural Heat. We may, therefore, in general, affirm of *Manna*, that it's Use is more extensive, and it's Nature better accommodated to most Persons, than that of any other lenitive or purgative Medicine; so that it is possessed of some peculiar Virtues, which are not to be found in other Purgatives. Such is the Nature of *Manna*, that it expeditiously discharges from the Body all kinds of Humours, whether serous, bilious, or acid; it corrects and sheaths up the Acrimony of the bilious Humours; and, which generally happens with other Purgatives, it is neither entangled, nor its force impaired, by acid Humours, but, by correcting and subduing them, rather facilitates their Evacuation by the Anus. Besides, the Use of *Manna* is suited and adapted to all those, who, in Consequence either of their Weak-

ness, or the Delicacy of their nervous Systems, cannot bear acrid Medicines, though at the same time, their *Primæ Viæ* are to be freed from the *Sordes* lodged in them. This Medicine is calculated for Persons of all Ages, Sexes, Constitutions, and Countries. For which reason, *Zacutus Lusitanus*, gives a compendious, but just Account of the Virtues of *Manna*, in the following Words: "*Manna* may be exhibited to Persons of all Constitutions; for it purges the whole Body from excrementitious Humours, and especially from Bile. It cleanses the Breath, is of a lenitive Nature, and, together with the thin, expels the viscid Humours from the Thorax, without doing any Injury to the Head, or nervous System. It strengthens the Viscera, corroborates the Stomach, purifies the Blood, exhilarates the Heart, renders the Breathing free, allays Thirst, and excites the Appetite: In a Word, every Part of the Body receives singular Benefit and Advantage from it." *Manna* is esteem'd a most excellent Cathartic in the Disorders of Children from Acidities, for old People and even pregnant Women, and where-ever acid and bilious Juices abound, or whenever there is a great Acrimony of the Humours. It is much recommended in rheumatic, arthritic, and scorbutic Disorders, in the Cough, and is said particularly to be of very great Service in Fevers, in hypochondriac Disorders, in Colics, the Stone in the Urinary Passages, or a Suppression and Heat of Urine. Besides the Virtues of *Manna* consider'd as a Cathartic, it also soothes as it were, and relaxes, and by this Property removes Spasms and Contortions of the Fibres. *Manna* is, also, possessed of a diuretic Quality, and is upon the whole, perhaps, the very best and most universally useful Cathartic in the Shops. *F. Hoffman* as-

ferments, that *Manna* is generally given in too small Doses, by which means the Sordes contain'd in the Intestines are put in Motion, but not carried off, in consequence of which Flatulencies are excited. He therefore advises to give it in the Quantity of three or four Ounces to Adults, and to Infants and Children from two Drams to half an Ounce; and by this means he informs us, that it purges with Efficacy, Safety, and without exciting those Flatulencies, which it raises if taken in a small Dose. *Manna*, like Honey dissolv'd in Water, will ferment, and produce a vinous Liquor. And I have great reason to suspect, that *Manna* is extremely powerful in the dissolving that Inflammatory Spissitude of the Blood and Juices, which is the most general Source and Support of Inflammations and Fevers. That *Manna* is most esteem'd which is white and recent; that which is dark-colour'd and brown being old and decay'd. The Druggists sometimes adulterate it with Sugar.

Marrubium album, Prassium, Offic.

Marrubium album vulgare, C. B. P. White Horehound. It grows frequently in publick Roads, flowering in June. The Herb is used, which is esteem'd healing, drying and pectoral; it is recommended in Obstructions of the Lungs, Liver, Spleen, and Uterus, in *Phthisis*, Spitting of Blood, difficult Labour, a Retention of the Lochia, and a Jaundice. The Leaves of this Plant, gives no Tincture of red to the blue Paper; they are very bitter, and have a penetrating Smell. It is probable, that in *Flanders* this Smell may approach to that of Musk; for *Dodonæus* affirms it does so. The bitter natural Salt of the Earth, composed of marine Salt, Sal Ammoniac, and Nitre, seem to be united in this Plant, with a considerable Quantity of Sulphur, Phlegm, and Terrestrial Parts. This

Plant by the chymical Analysis, yields a great deal of acid Phlegm, Oil, and Earth; a little urinous Spirit; some concreted, volatile, and a fixed Salt, a little lixivial. Thus it is no wonder, if the white Horehound should be a great Dissolver, and a good Aperitive; and excellent for those who have the Asthma or Jaundice. The Juice of this Plant is given to drink, from two Ounces to six, for Rheums and stubborn Coughs.

Marrubium nigrum, Ballote, Offic. *Marrubium nigrum fætidum, Ballote Dioscoridis*, C. B. P. Black Horehound. It grows in Hedges, flowering in June. The Herb is us'd, which is esteem'd good in hypochondriacal and hysterical Disorders. *Boerhaave* recommends it as an excellent Uterine, and says it is good against apoplectic, epileptic, and hysterick Fits.

Marum, Offic. *Marum vulgare*, Park. Herb Mastich. It is cultivated in Gardens, flowering in June. It is sudorific, cephalic and aperient; it is of Service against venomous Bites, and a cadaverous Breath. It is hotter than Betony, and not so hot as *Serpyllum* and Thyme, tho' it has the same Virtues, only is a little more astringent.

Marum Syriacum, Offic. *Marum Syriacum, vel Creticum*, Park. *Majorana Syriaca vel Cretica*, C. B. P. Syrian Herb Mastich. This Plant grows naturally in *Candia* and *Syria*, but with us is cultivated in Gardens, flowering in June. It is remarkable that Cats are great Admirers of this Plant, inasmuch that they will eat and destroy it, if they can get to it, and rowl themselves upon it with all the Marks of excessive Pleasure. This Plant is very friendly to Nature; the Leaves, rubbed, emit an Odour, which affects the Brain like volatile Salt; but in Summer, when scorched, and, as it were, burnt by the

the fervent Heat of the Sun, yields no Smell at all, tho' rubbed never so vehemently. Hence it appears to contain an acidulous volatile Salt, and that nothing in Art or Nature affords the like. This Salt is very good against Apoplexies, Lethargies, and hysteric and epileptic Disorders, provided they proceed from a cold Cause. The Spirit, sprinkled in any Place, diffuses almost grateful Scent; and Paper, impregnated with it, maintains its Fragrancy for a whole Year. It is a Plant of an extraordinary Use in phlegmatic Disorders, proceeding from the Stomach, the *Anasarca*, and stomachic and uterine Disorders. The Conserve, with Spirits of Wine, yields a Spirit far exceeding Hungary Water. It is of Service, also, in venomous Bites, a fetid Breath, and is an Ingredient in Theriacal Compositions.

Mastiche, Mastich. This is already taken notice of under the Article *Lentiscus*.

Matricaria, *Parthenium*, Offic. *Matricaria vulgaris simplex*, Park. Feverfew. It grows in Hedges, flowering in June. It is called *Matricaria*, from *Matrix*, because it is of singular Efficacy in Diseases of the Matrix; it is also, called *Parthenium*, from *παρθενος*, a Virgin, for the same Reason. It has a peculiar Smell, and is proper in all cold Diseases of the Uterus; and has a more bitter, oleous, and acrid Taste than Chamomile, as savouring somewhat of Camphire and Castor. Hence it is of Service in provoking the Menfes, expelling the Reliques of the Secundines, false Conceptions, and the Lochia, when retained by a cold Cause. Its Virtues consist in an inflammable, aromatic, and highly volatile Oil: It is made the same Use of as Chamomile; and Baths for the Feet are prepared of it, in order to provoke the Menfes. Feverfew in Clysters, discusses Flatulencies, and

is of excellent Service in Surgery, for discussing Tumors and Contusions. It is recommended for Impotence, and for the Dropsy; it purges by Urine, and sometimes by Stool. It is also recommended for putrid Fevers, for the Stone in the Kidneys, for a Vertigo, and for the Gout.

Mays. A Name for the *Triticum Indicum*, or Indian Wheat.

Mecaxochitl, Offic. *Piper longum humilius fructu à summitate caulis propendente*, Cat. Jamaic. Small American long Pepper. It grows in *New Spain*, and is an Ingredient in Chocolate, but is seldom found in our Shops. It is healing and drying, and may be reckon'd as a Species of long Pepper. It is drank with Chocolate, to which it gives a grateful Taste: It is corroborative; heats the Stomach, and corrects a fetid Breath, it attenuates gross and viscid Humours; resists Poison, and is good for the Cholic and Iliac Passion.

Mechoacana alba, Offic. *Mechoacan*, J. B. *Bryonia*, *Mechoacana alba*, C. B. P. White Mechoacan. It is brought us to from *America*, the Root is used, which purges pitiitious, aqueous, and serous Humours from all Parts of the Body, and especially from the Head, and nervous System, and from the Breast. The *Spaniards* prepare from it a white *Fæcula*, called by them *Lac Mechoacannæ*, half an Ounce of which is a Dose, powder'd and mix'd in Broth. That is to be esteem'd which is recent, white, and ponderous.

Mechoacana nigra is Jalap.

Meconium. The concreted Juice of the Poppy, in which Sense it is the same as *Opium*.

Medica, Offic. *Medica major erectior, floribus Purpurascens*, J. B. *Trifolium Burgundicum*, Ger. Emac. Medic-Podder. It takes its Name *Medica* from *Media*, because it was brought from thence into *Greece*, in the Time of the *Persian* Invasion, under

under *Darius Hyfaspes*. It is sown in Fields, flowering in the Summer. The Herb is used, which is call'd by the *French St. Foin*, and *Foin de Bourgogne*. In *Spain* it is constantly used to nourish and fatten Cattle, which they find by Experience to improve them beyond any other Fodder whatever. The green Seed made into a Cataplasm relieves those who want Refrigeration.

Medium, Offic. *Medium Dioscoridis Rauwolfio*, J. B. *Viola Mariana, laciniatis foliis, peregrina*, C. B. P. Syrian Bell-flower. It grows in *Syria*, and *Greece*; the Root and Seed are used. The Root stops the Menfes, but the Seed provokes them.

Melampyrum, Triticum vaccinum, Offic. *Melampyrum, comā purpurascēte*, C. B. P. Cow-Wheat. It grows among Corn, flowering in *June*; the Seed is the Part in Use, but has hitherto been neglected in Medicine. In *West Friesland* and *Flanders*, where it is very plentiful, it vitiates the Bread, and renders it black, and those who feed on it complain of a Heaviness in the Head, as if they had eaten Darnel; but *Tabernaemontanus* often eat of this Bread, and assures us, that he found it very favoury, and not hurtful.

Melampyrum sylvaticum, Cratæogonum, Offic. *Melampyrum luteum latifolium*, C. B. P. Wild-Cow Wheat. It grows in Woods and Thickets, flowering in *June* and *July*; the Seed is used, which stimulates to Venery.

Melanthium, Offic. *Melanthium sylvestre sive arvense*, J. B. *Nigella arvensis, cornuta*, C. B. P. It grows among the Corn in *Germany*, flowering in *June*. The Seed is used, which is said to attenuate and open, it is principally used in mucilaginous Infarctions of the Lungs, to promote Expectoration, to increase Milk, to excite Urine and the Menfes, and to cure venemous Bites; is is esteem'd a Specific in Quartan and Quotidian Fevers.

Melilotus, Offic. *Melilotus Officinarum Germaniæ*, C. B. P. *Trifolium odoratum*, *frus Melilotus vulgaris, flore luteo*, J. B. Melilot. It grows in Hedges and among Corn, flowering in *July*. *Melilot* takes its Name from μέλι Honey, and λωτός a celebrated Plant among the Antients, not from its sweet Taste, for the Leaves, Flowers, and Fruit are bitter, but because there is no Plant from which the Bees gather sweeter Honey, or more in Quantity. The Leaves, besides their emollient Quality, are endued with a Virtue of healing in a very gentle Manner, by their aromatic Quality; the Flowers, are also aromatic and emollient, and therefore, reckoned among internal Pectorals; but they are more used outwardly, as emollient, discutient, and anodyne, on which Accounts they are serviceable in all Sorts of Inflammations, particularly of the *Uterus, Testes*, and *Anus*, as well as in neptritic, and Arthritic Pains. The Seeds are discutient, aperient, aromatic and Resolvent, and reduc'd to a Meal compose a Cataplasm, which is highly emollient and resolvent. The Decoction of the Leaves and Flowers taken inwardly is very good to cleanse the Passages obstructed by Cold. A Decoction of the Tops of the Plant is good for Inflammations of the Intestines, the Colic, Retentions of Urine, and the Rheumatism; they are prescribed in Conjunction with Chamomile Flowers, in Cataplasms, Plaisters, and Fomentations. This Plant gives hardly any Tincture of red to the blue Paper; it is acrid, bitter, styptic, odoriferous, and gives a slight Nausea, when chew'd; by which it seems, that its Salts very much resemble the natural Salt in the Earth, united with a great deal of essential Oil, and terrestrial Parts. For by the Chymical Analysis, the *Melilot*, besides a great deal of acid Phlegm, yields, also, a good Quantity of Oil of Earth,

together with an urinous Spirit, volatile, concrete; and a fixed Salt very lixivial.

Melilotus vera, Offic. *Melilotus Italica folliculis rotundis*, C. B. P. Italian Melilot. It is a Native of Italy, but cultivated with us in Gardens, flowering in July. The Herb and Flowers are used, and agree in Virtues with the preceeding.

Melissa, Offic. *Melissa hortensis*, C. B. P. Baulm, Baum, or Balm. It is cultivated in Gardens, flowering in June. This Plant is endowed with extraordinary Virtues; for Pleasantness of Taste and Smell, no Herb exceeds it. The Leaves infused in Wine impregnate the same with its grateful Scent, and render it an highly useful and comfortable Medicine in all melancholly Affections; for it greatly exhilarates, being very cordial. The expressed Juice has, also, an Astringence, and is good for those who are subject to Melancholy, and hypochondriacal Flatulencies; and, in such Cases, it is always proper to be exhibited, though attendant on hot Disorders. The Herb fresh gathered, and infused in half Wine and half simple Water cold, or drank after the manner of Tea, affords great Relief to melancholly Patients. This Herb is an excellent Remedy for hysteric Women, since it wonderfully exhilarates the Spirits. Women subject to rumblings of the Intestines, Eructations, and Syncopes, are greatly relieved by Baum Leaves, bruised and held to the Nose, in the Paroxysms of these Disorders. A medicated Wine prepared of this Herb, is highly beneficial in gouty Rheumatisms, and arthritic Pains, provided it is daily used. A Decoction of the Leaves corroborates lax Gums. An infusion of it with Wine, Ale, or Water, contributes greatly to the Cure of that Species of Melancholy, which draws its Origin from a Defect of Spirits. It is com-

mended against Epilepsies, Madness, Barrenness, Apoplexies, Palsies, Vertigos, and Faintness. It is beneficial in Crudities of the Stomach, Obstructions of the Menstrues, and a Retention of the Lochia. It removes the fetid Smell of the Breath, and is serviceable to those who labour under a Retention of Urine. Externally, it is used in Cataplasms, Baths for the Feet, poisonous Stings, and other Misfortunes of a like Nature.

Melissa Fuchsi, Ger. Emac. *Pseudo-Melissa*, Offic. *Melissa adulterina quorundam amplis foliis & floribus, non grati odoris*, J. B. *Lamium montanum Melissae folio*, C. B. P. Bastard Baum. It grows in Woods, and the Herb is used, which is aperitive, and is esteem'd by some as a Vulnerary. It is greatly recommended in a Suppression of Urine.

Melo, Offic. *Melo-vulgaris*, C. B. P. Musk Melon. It grows in Gardens, flowering in June. The Seed is used, which is one of the greater cold Seeds. It is esteem'd hepatic and nephritic, good for Coughs, Consumptions, and Fevers, and is serviceable in the Strangury, and Heat of Urine, and to allay Thirst; in other Respects it agrees with the other greater cold Seeds.

Mentastrum, Offic. *Mentastrum spicatum folio longiore candicante*, J. B. Horse-Mint. It grows in moist Meadows, flowering in July; the Herb is used, which agrees in Virtues with the *Mentha*, or Spear-Mint.

Mentastrum minus, Ger. Emac. *Mentastrum hirsutum*, Park. Theat. *Mentha palustris folio oblongo*, C. B. P. Cylonian Plant. It grows in watery Places, and frequently about the Sides of Rivers, flowering in August and September. The Herb is used, which is an efficacious Remedy in Deafness.

Mentha, Offic. *Mentha angustifolia spicata*, C. B. P. *Mentha Romana*, Ger. Emac. Spear-Mint. It grows

grows in Gardens, flowering in *July*. The Herb is used, which abounds in a subtle and sedative comforting Oil, which is highly friendly to the Nerves. But its Power of corroborating the Tone of the Stomach and Intestines is not only owing to this Oil, but, also, to a sub-astringent earthly Principle: For which Reason this Herb, either in Substance, or infused in Water, Wine or Brandy, is highly beneficial, whether used internally, or externally, in stopping Hiccups, Vomitings, immoderate Fluxes, and Colics. After the previous Use of Purgatives, inveterate *Gonorrhæas*, and a *Fluxus Albus*, have been happily removed only by means of Spirituous Mint-Water, exhibited in due Quantities: It is beneficial to Patients afflicted with atrabilarious and hysteric Disorders. In bloody Dysenteries, the Herb bruised and applied to the Abdomen, is a sovereign Remedy; but is said to destroy that Power to which we give the Name of Virility. It is carminative, and excites copious Eructations. It is beneficial in the Scurvy, provokes Urine, and the Menfes. The Herb boiled with Whey, and applied externally to the Face, solicits erysipelatous Swellings, and Inflammations of the Fauces, to the Surface; and, by that means, relieves the internal Parts. Of the tender Tops are prepared an Oil, of which an *Elæosaccharum* and Balsam are made, which are highly beneficial against Convulsions proceeding from a cold Cause; and are excellent for the Cure of Contusions and Wounds. This Plant also kills Worms.

Mentha aquatica, *Sisymbrium*, Offic. *Sisymbrium*, J. B. *Mentha rotundifolia palustris*, *seu aquatica major*, C. B. P. Water-Mint. It grows in moist Places, flowering in *July*. The Herb is used, which agrees in Virtues with the former. This Plant was by an illiterate London Quack

esteem'd so powerful a Specific against the Stone, that, when he had Occasion to exhibit it for that Purpose, he retired to his Closet, and cut it so small, that it was no easy Matter to discover what Plant it was. At last a small Quantity of this *Arcanum* came into the Hands of Dr. *Watson*, who sowed it in his Garden, and the Produce revealed the Secret. This Mint is justly commended against Pains of the Stomach: For which Reason the Water distilled from it is by some called Colic-Water.

Mentha Crispa, Offic. *Mentha crispata verticillata*, C. B. P. Crisped or Curled-Mint. It grows in watery Places, flowering in *August*. The Herb is used, the Powder of which is recommended against a Weakness of the Stomach, and against Vomiting.

Mentha fusca, Offic. *Mentha bortenensis verticillata*, *Ocymum odore*, C. B. P. Red-Mint. It grows in Gardens and watery Places. The Herb is used which agrees in Virtues with the other Species of Mint.

Mentha Piperis sapore, Offic. *Mentha palustris spicis brevioribus*, *et habitariis, foliis oblongis, sapore Piperis*, Raii Hist. Pepper-Mint. It is found about Ditches and watery Places, flowering in *August*. The Herb is used, which is esteem'd a Specific in the Stone in the Kidneys and Gall Bladder. The distill'd Water is by some called Colic-Water.

Mentha sylvestris, Offic. *Mentha sylvestris rotundiore folio*, C. B. P. Round-leaved Horse-Mint. It is produced in watery Soils. The Herb is used, which is esteem'd stomachic and hysteric.

Mercurialis, Offic. *Mercurialis masculina*, J. B. French Mercury. It grows in Gardens, flowering in Summer. *J. Bauhine* and others found something nitrous in this Plant; it is of an herby Taste, a little

de saltish, and gives no Tincture of red to the blue Paper. Perhaps the great Quantity of Sulphur, with which it abounds, hinders the Sal Ammoniac from manifesting itself; for by the chymical Analysis it yields a great deal of volatile concrete Salt, Oil and Earth. Hippocrates, Dioscorides, and Galen agree, that this Mercury is purgative; the Syrup made with its Juice is laxative and appetitive. The Water, in which it has been macerated cold for twenty four Hours, is given for the Dropsy, Cachexy, and Green-sickness: This Plant is used in *Semicupiums* for the Suppression of the Terms; for it is very emollient also; and they make those Persons who are believed to be barren, take three Ounces of its Juice depurated, and mix'd with two Drams of Tincture of Steel. It is also good to soften Tumors.

Mercurialis repens, J. B. *Cynocrambe*, Offic. *Mercurialis montana testiculata* & *spicata*, C. B. P. Dog's Mercury. It grows in Woods and Hedges, flowering in the Spring. The Herb is used, and tho' *Prevotius*, *Morèton* and others, affirm it to be possess'd of the same Virtues with the former, yet the Effects it produc'd on some Persons near *Shropshire* sufficiently prove it to be of a soporiferous and malignant Quality.

Another Species of *Mercurialis*, is the *Phyllon* or Childrens Mercury.

There is also another Sort of *Mercurialis*, which is the *Bonus Henricus*, or *English Mercury*.

Mespilus, Offic. *Mespilus Germanica folio Laurino, non serrato, sive Mespilus sylvestris*, C. B. P. The Medlar Tree. It is cultivated in Gardens, flowering in May. The Fruit and Seed are used; the Fruit is cooling, drying, and of an austere Taste; it is very astringent and binding, and injurious to the Stomach, especially whilst hard. When soften'd, they are less astringent,

not so injurious, and quickly rot, and then only they are eatable: They are used both externally and internally, in Diarrheas and Dysenteries. The Seed are accounted good for the Gravel and Stone.

Mespilus Aronia, Offic. *Mespilus aronia veterum*, J. B. *Mespilus Apii folio laciniato*, C. B. P. The Neapolitan Medlar. It is cultivated in the Gardens of the Curious, flowering in May. The Fruit is used, which moderately binds the Belly.

Meum, & *Meum Athamanticum*, Offic. *Meum foliis Anethi*, C. B. P. Spignel. It grows in Meadows and Pastures, flowering in June. The Seed and Root is used, which dissolves Flatulencies, and is principally us'd in Inflammations and Eructations of the Stomach, for provoking Urine and the Menses, in a Suffocation of the Uterus, for the Gripes, for Catarrhs, and for expectorating the Tartar of the Lungs. The Seed has the same Virtues as that of Fennel, but is more balsamic, and recommended in an Asthma, where there is an Adhesion of slimy and viscid Matter, provided there be no Inflammation. They say that no Plant is a greater Provocative to Veneriness than *Meum*. Chew'd in a Morning fasting, it corrects a fetid Breath, and strengthens the Gums.

Meum Alpinum, C. B. P. *Mutellina*, Offic. *Meum Alpinum Germanicum, illis Mutellina dictum*, Park. German, or Mountain Spignel. It grows on hilly Places; the Herb is used, which agrees in Virtue with the former.

Milium, Offic. J. B. *Milium semine luteo*, C. B. P. Millet. The Seed is used, which is of extraordinary Service in Diseases of the Lungs, and Exulcerations of the Kidneys; made into a Cataplasm, it is anodyne and resolvent. It potently provokes Sweat and Urine.

Milium

Milium Solis. A Name for the *Lithospermum*, or *Gromwell*.

Millefolium, Offic. *Millefolium vulgare album*. C. B. P. Yarrow. It grows in Pastures, flowering in *June*. The Leaves are used. This Plant is a little acrid, bitter, aromatic, and gives a considerable Tincture of red to the blue Paper. The acid Part of the natural Salt of the Earth, disengaging itself of the other Principles thro' the Texture of this Plant, forms, with the terrestrial Parts, an aluminous Salt, united with a little essential aromatic Oil. By the chymical Analysis are extracted from Yarrow several acid Liquors, a great deal of Earth, no volatile concrete Salt, but a little urinous Spirit. Thus this Plant is vulnerary, solvent and astringent. It is used in Ptisans, and Infusions, after the manner of Tea. Some boil its Leaves in Broths, to stop all sorts of Hæmorrhages, and especially the irregular Flux of the Piles, or Fluor Albus. The Water of Yarrow is recommended by some for the Epilepsy; and Wine or Mead, impregnated with this Plant, stops all Sorts of irregular Fluxes. Externally, it is of Service in the Tooth-Ach, Hernia, Tumors of the Penis, Head-Ach, Pterygia of the Eyes, and poisonous Stings or Bites.

Millefolium nobile, Ger. Emac. *Achillea*, Offic. *Achillea Mille-folia odorata*, J. B. Achilles Iron-wort. It grows in Germany, Italy, and France, flowering in *July*. The Herb is used, which represses all Sorts of Hæmorrhages; and, outwardly used, is an excellent Vulnerary.

Millegrana, a Name for the *Herniaria*, or Rupture-wort.

Mirabilia Peruviana, Ger. Emac. *Solanum Mexicanum fere magno*, C. B. P. *Jalapa flore purpureo*, Boerh. Ind. Alt. Marvel of Peru. It is cultivated in Gardens, flowering in *August*. The Leaves and Root are

used; the former of these, when bruised, dissipate cold Tumors, if applied to them; and the Water, in which an Ounce or two of the recent Roots have been boiled, is an excellent Purgative for dropical Patients, and we are inform'd by some, that two Grains of the Root, taken internally, are highly efficacious in evacuating Waters in a Dropsy.

Mollugo, Offic. *Mollugo montana angustifolia*, vel *Gallium album latifolium*, C. B. P. Bastard Madder. It grows in Hedges and Bushes, flowering in *June*; the Root is used, which is possess'd of the same Virtues as the *Rubia Tinctorum*, or Common Madder.

Mollugo montana, Offic. *Mollugo montana, latifolia, ramosa*, C. B. P. Mountain Wild-Madder. It grows on hilly Places, flowering in *July*. The Herb is used, which is said to be aperitive.

Moly Dioscoridis. A Species of Garlick. See *Allium*.

Moly Theophrasti. Another Species of Garlick. See *Allium*.

Molybdæna. A Name for the *Dentillaria* or Lead-wort.

Momordica. A Name for the *Balsamina*, or the Male-Balsam Apple.

Monophyllon, Offic. *Monophyllon sive Unifolium*, Park. *Smilax unifolia humillima*. Tourn. Inst. One Blade. It grows in Woods and Thickets, flowering in *May* and *June*. The Flower is used, which is alexipharmic and vulnerary.

Morsus Diaboli, *Succisa*, Offic. *Morsus Diaboli vulgaris, flore purpureo*, Park. *Succisa glabra*, C. B. P. Devils Bit. It grows in Meadows, flowering in *August*. The Leaves, Flowers, and Roots are used. It is alexipharmic and vulnerary, and in other Respects it agrees with the *Scabiosa*. The Leaves are bitter, and give a deep Tincture of red to the blue Paper. The Root, which is

bitter and styptic, stains the blue Paper with a still deeper Red.

Morsus Gallinæ. A Name for the *Alfina* or Chickweed.

Morsus Ranae, Offic. *Morsus Ranae sive Nymphæa minor*, J. B. *Nymphæa alba minima*, C. B. P. Frog-bit. It grows in muddy and slow Waters, flowering in *July*. The Herb is used, which agrees in Virtues with the white Water Lily, or *Nymphæa*.

Morus, Offic. *Morus fructu nigro*, C. B. P. The Mulberry Tree. It is cultivated in Gardens, and the Fruit is ripe in *August*. The Bark of the Root, and the Fruit is used, the former of which is heating, drying, and astringent, good to open Obstructions of the Liver and Spleen, and helps the Jaundice. The unripe Fruit is refrigerating and drying, and is principally used in all kind of Fluxes, as the *Diarrhæa*, *Dysentery*, menstrual Flux, and spitting of Blood, and externally used, it is good for Inflammations of the Fauces, and Ulcers. The ripe Fruit is refrigerating, drying, and somewhat loosening, it allays Thirst, and excites an Appetite, and is recommended by some for the Scurvy.

Moxa. This is a Kind of downy Substance, taken from the Leaves of the *Artemisia Chinensis*, *cujus Mollugo Moxa dicitur*, Pluk. Phytog. or the *Chinese* Mugwort. This is used by the *Indian Nations*, as something of the same kind was formerly employ'd by *Hippocrates*, and other ancient Physicians, in cauterizing Parts afflicted with Pain. Some Moderns highly extolled this Operation, as the most effectual Remedy for curing, and even wholly extirpating the Gout. But tho' this Operation was for some time highly commended in *Europe*, it is now entirely disused, and not without Reason; for, besides the acute Pain produced, it has often little or no Effect. Among the *Chinese* and *Japanese* however, this Opera-

tion, and Acupuncture, continue in the highest Esteem. These Cauterizations are, also, said to be at present used by the *Arabians*.

Musa, Offic. *Musa Arbor*, J. B. *Palma humilis longis latisque foliis*, C. B. P. The Plantain Tree. It grows in both *Indies*, and the Fruit is used, which is very nourishing, provokes Urine, and stimulates to Venerary. The Leaves of this Tree are sometimes so large, that a Man may cover his whole Body with one of them, and are said to be those with which *Adam* and *Eve* cover'd their Nakedness; which seems more probable, than that they should make Use of the Leaves of the common Fig-Tree for that Purpose, as represented by the Painters.

Muscari. A Name for the *Bulbus Vomitorius*, or Musk Grape Flower.

Muscipula, Offic. *Muscipula viscaria sive Lychnidis Species*, J. B. Catch-Fly. It grows among Corn, flowering in *June* and *July*. The Seed is used. It agrees in Virtues with the *Lychnis*.

Muscus, Offic. *Muscus arboreus: Usnea Officinæ*, C. B. P. Hairy Tree Moss. This Moss is found hanging upon old Trees, but seldom in *England*. The whole Plant is used, which is accounted astringent.

Muscus marinus, Offic. *Muscus marinus capillaceus Dioscoridis*, Park. Sea Moss. This Plant is found in the *Adriatic Sea*. The whole is used, and is of an inspissating Quality, checks Congestions of Humours, and refrigerates the Parts affected with arthritic Pains.

Muscus pulmonarius, Offic. C. B. P. *Muscus pulmonarius sive Lichen arborum*, Park. Tree Lungwort, Oak Lungs. It grows upon Trees, and especially upon Oaks, and is of an earthy and astringent Taste. The whole Plant is used. It is drying and astringent, good to stop Bleeding, and

and to agglutinate recent Wounds ; and is esteem'd by the common People good for Disorders of the Lungs.

Muscus pyxidatus, Offic. J. B. *Muscus pyxoides*, C. B. P. Cup Moss. This Moss is found upon dry barren Places. The whole Plant is used, which is esteem'd a Specific in the Whooping Coughs of Children.

Mutellina. This is specify'd under the Article *Meum*.

Myagrum. This is already taken Notice of under the Article *Alyssum*.

Myosuros, Offic. J. B. *Myosuros*, five *Cauda maris*, Merc. Bot. *Holosteo affinis Cauda muris*, C. B. P. Mouse-Tail. It is found in the Fields, flowering in May. The Herb is used, which is said to be possess'd of the same Virtues with the Plantain.

Myrica. A Name for the *Tamariscus*, or Tamarisk.

Myrobalani, Myrobalans. Of this there are five Sorts, the first is the *Myrobalanus Inda Nigra*, Offic. *Indian* or black Myrobalans. This Fruit is more slender and narrow than any of the rest, with eight Ridges upon the Superficies. They are rough, solid and hard, and black both within and without, of a subacid, rough, and astringent Taste. The second is the *Myrobalanus Citrina flava*, Offic. Citron or yellow Myrobalans. This is an oblong, round, pentagonal, rough Fruit, of a Citron Colour, including an angular Stone, under a carnosus Bark. The third is the *Myrobalanus Chebula*, Offic. Chebule Myrobalans. This is an oblong rough Fruit, with five Ribs on the Superficies, including an oblong, thick, and cavernous Stone, under a carnosus Bark. It is of a roughish Taste, and the largest of all the Myrobalans. The fourth is the *Myrobalanus Bellerica*, Offic. Belleric Myrobalan. This is a round and somewhat angular Fruit, about the Size of a large Gall, containing a

hard Stone, under a carnosus Bark. It is of a subacid and astringent Taste. The fifth is the *Myrobalanus Emblica*, Offic. Emblic Myrobalan. This is a roundish black Fruit, flat at each End, sexangular, and easily separating into six Parts, containing an hexagonal, round, white Stone, divided into six Cells. The Citrine Myrobalans, are said to purge Bile. The *Indian*, black Bile, and the other three, first Phlegm and then Bile. *Geoffroy* says, that they purge gently, and strengthen the Intestines at the same time ; and therefore, are very proper in Diarrhœas and Dysenteries, and make a good Succedaneum for Rhubarb ; only the Dose must be larger ; and they may, likewise, be very conveniently mixed with Rhubarb.

Myrrha, Offic. C. B. P. Myrrh. This is a resinous, dry, and hard Substance, of a brown, or reddish yellow Colour, of a subacid, bitter, aromatic Taste, and fragrant Smell. It is of a heating, drying, opening and subastringent Nature, and is said to attenuate, maturate, discuss, and resist Putrefaction. It is principally used in Obstructions of the Uterus, to promote the *Menses*, accelerate Delivery, and procure a Discharge of the *Lochia* and Secundines. It is also recommended for Infarctions of the Lungs, Hoarseness, Coughs, Quinsies, Pleurisies, Colics, and for the Worms. Externally apply'd it is said to cure Wounds and Ulcers. The Committee of the College of Physicians, employ'd to form the last Dispensatory, absolutely deny, that it is so difficult to dissolve Myrrh in Water or Wine, as is generally imagin'd ; but affirm on the contrary, that boil'd in Water it dissolves freely, and while the Water is boiling hot, keeps almost entirely suspended ; but when the Water is cold, about one third only, or less subsides,

much the greater Part remaining united with the cold Water. This Water evaporated leaves a Gum dissolvable again in Water, but will not give so much as a Tincture to Spirit: Spirit will take up a great Part of what precipitates from the Decoction, the rest seeming to be Dregs. They also assert, that macerating Myrrh with Salt of Tartar, will not enable Spirit to dissolve more of the Myrrh, than this resinous Part now mentioned; and the same Quality may be extracted by Spirit from the whole Myrrh without any such Preparation. A Quantity of Myrrh, first powdered, being divided into two equal Parts, one reserved by itself, and the other macerated with Salt of Tartar for more than half a Year, then both set in the same Heat with equal Quantities of Spirit, each of these Tinctures, by evaporating equal Portions of them, were found impregnated with the same Quantity of Resin from the Myrrh.

Myrrhis, Offic. *Myrrhis major* vel *Cicutaria odorata*, C. B. P. Sweet Cicely. It is cultivated in Gardens, flowering in June. The Leaves are used. It has the Taste of Cloves, is used in Sallads, and has the aperitive, exhilarating, diuretic and demulcent Virtues of the Clove, and is a very great Antiscorbutic, the expressed Juice being taken in Whey, to the Quantity of some Ounces. A Cataplasim prepared of the Leaves, is applied to the *Perineum* and *Ossa Pubis*, for Bruises by Falls, and for Contusions. It is an excellent Remedy in a Suppression of Urine from a Spasm of the Bladder, or its Sphincter, and to provoke the *Menses*, or discuss Tumors. It is also discutient and resolvent, and may be exhibited in the Pleurisy, as, also, in a Peripneumony, with Whey and Honey, in order to resolve the Phlegm: It is, also, proper in hot

Distempers, as well as chronic, which, though seeming to imply a Contradiction, is nevertheless true: It potently exhilarates, and is, therefore, exhibited to melancholy Patients in Whey.

Another Species of *Myrrhis*, is the *Daucus Creticus*, Offic. *Myrrhis annua semine striato, villosa, incano*, Tourn. Inff. Carrots of Crete, or Candy Carrot. It is brought from Candy. The Seeds are used, which are oblong, grey, acuminated, hairy, and of a fragrant Smell and Taste. They are of singular Efficacy in Uterine Affections, and diuretic. Thus it discusses Flatulencies, and is principally used in Obstructions of the Menes, Strangulations, and Pains of the Matrix, in the flatulent Colic, Hiccup, Dysury, inveterate Cough, and the like Disorders.

Myrtus, Offic. *Myrtus communis Italica*, C. B. P. Common Myrtle. This Plant is cultivated in Gardens, flowering in June; both its Leaves and Berries, which are used in the Shops, are of a blackish Colour, of an oblong round Form, of an astringent Taste, and a faint and languid Smell. Both of them are refrigerating, drying, and highly astringent; the Powder of the Leaves, if sprinkled on the Axillæ and Groin, prevents their fetid Smell. These Leaves, if the Body is rubb'd with them, stop immoderate and profuse Sweats. They also, prove beneficial in catarrhus Disorders and Fluxes; they are an excellent defensive in the Herpes, heal Putrefactions of the Mouth; stop Hæmorrhages of the Nose, and cure a Polypus. The Berries mitigate Inflammations of the Eyes; and are beneficial in Luxations of the Joints, and Fractures of the Bones, and its *Rob* is good in all Disorders, which require Refrigeration and Astringency. Some derive its Name from *Myrrha*, Myrrh, because it smells

Smells like Myrrh; and others will have it so called from an Athenian young Woman named *Myrrha*, who was beloved by *Pallas*, and after her Death changed by her into this Tree.

Myrtus Brabantica. A Name for the *Elæagnus* or Dutch Myrtle.

Napellus. Monks-Hood. A Species of *Aconitum*.

Napus dulcis, *Bunias*, Offic. *Napus sativa*, C. B. P. Navew Gentle. It is sown in Gardens. The Root is used in the Kitchen, and the Seeds in Physic, which are said to be heating, drying, absterging, aperitive, and digestive; and to be Enemies to Venery.

Napus sylvestris, Offic. C. B. P. *Napus sylvestris* sive *Bunias*, Park. Rape. It grows amongst Corn, and on the Sides of Ditches, flowering in the Summer. The Seeds are used which agree in Virtues with the former.

Napus sylvestris Cretica, C. B. P. *Pseudo-Bunium*, Offic. Candy wild Navew. It is found in the Island of *Crete*. The Herb is us'd, which according to *Dioscorides* cures Gripes, Stranguries and Pains of the Sides. It also discusses Scrophulous Tumors, if mix'd with Salt and Wine, and apply'd to them by way of Ointment.

'Tis a Controversy hotly agitated among the *Literati*, whether the Seeds of the *Napus Dulcis*, or those of the *Napus sylvestris* ought to be used in the Composition of *Venice Treacle*. The Seeds of the former are for this Purpose used in our Shops. In this they imitate the *Greeks*; for *Dioscorides* makes not the least Mention of the *Napus sylvestris*. *Andromachus* the Elder, also, orders the Seed of the *Napus dulcis*, and *Matthiolum*, in the fifth Book of his Epistles to *Balthasferas* affirms, that the Seeds of the *Napus dulcis* resist Poison more power-

fully than those of the *Napus Sylvestris*. *Andromachus* the Younger, when enumerating the several Simples which enter the Composition of the *Theriaca*, commends the Seeds of the *Napus sylvestris*, as being more acrid, and of consequence more efficacious in promoting the Intention of the Medicine. But *Galen*, in his first Book de *Antidotis*, differs from both these Opinions, and recommends the Seeds of the *Pseudo-Bunium*, as most proper for composing the *Theriaca*.

Narcissus, Offic. *Narcissus pallidus circulo luteo*, C. B. P. Common pale Daffodil, or Primrose Peerless. It grows on Banks, and in Meadows, flowering in *April*. The Root is used, which taken either in Meat or Drink, is an Emetic. It is of Service in Ambuitions, conglutinates the divided Nerves, is effectual in Luxations of the *Malleoli*, and inveterate Pains of the Joints; removes cutaneous Blemishes in the Face, and the *Vitiligo*; cleanses foul Ulcers, breaks Abscesses, and draws out Splinters from the Body.

Narcissus luteus. A Name for the *Bulbocodium*.

Nardus Celtica, Offic. J. B. *Nardus Celtica Dioscoridis*, C. B. P. Celtic Spikenard. The Roots with the Leaves are used. The Roots are fibrous, hairy, and black, and have upon them small Leaves of a green-yellow Colour, of an acrid, bitter and aromatic Taste, and of a fragrant Smell, somewhat weighty. As it agrees in Genus and external Appearance with *Valerian*, so it seems to agree in Virtues. The Plant is heating and drying, and agrees in Virtues with the *Indian Spikenard*; but is more effectual in provoking Urine, strengthening the Stomach, and discussing Flatulencies; outwardly it is an Ingredient in the Composition of *Malagmas* and Ointments.

Nardus

Nardus Indica & Spica Nardi. Offic. *Nardus Indica vulgaris*, J. B. *Nardus Indica, quæ Spica, Spica Nardi & Spica Indica officinarum*, C. B. P. *Indian Spikenard*. The Root is used, which is long, fungous, and of the Thickness of one's Finger, of a yellowish-brown Colour, of a bitter, acrid, and aromatic Taste, and of a grateful Smell. That is best which is recent, light, having long Hairs upon it, and of a bitter Taste. It is brought from the *East-Indies*, and *Alexandria*. It is heating, drying, attenuating, astringent, nephritic and stomachic. It is principally used in Inflammations, the Jaundice, and to destroy Worms. *Galen* relates, that he cured an Emperor of the Colic in his Stomach, by rubbing that Region with an Ointment of this Nard. It may be given inwardly, from half a Dram to a Dram; and, in Infusions, from half an Ounce to an Ounce and half.

Nardus montana, Offic. *Nardus montana radice Olivari*, C. B. P. *Mountain Spikenard*. This is the Root of a Species of *Valerian* which grows in the Mountains of *Leon* in *Spain*, but we are not certain what the Ancients called by this Name. It is not much used in Physic; but its Virtues are like those of the *Nardus Celtica*.

Nasturtium aquaticum, Offic. *Nasturtium aquaticum supinum*, C. B. P. *Sisymbrium aquaticum*, Tourn. Inst. *Water-Cresses*. It grows in watery Places, flowering in *June*; the Herb is us'd, which is heating, drying, attenuating and aperitive, and is principally recommended for the Stone and Gravel, for Obstructions of the Liver, Spleen, and Menfes. It is reckon'd a Specific in the Scurvy, and cures all Diseases proceeding from a Viscidity and Ropiness of Blood. This Plant gives no Tincture of red to the blue Paper. It con-

tains a Salt pretty much resembling the *Oxysal Diaphoreticum Angeli Sala*, which is an alkaline Salt, over saturated with Acid. Besides this, there is in the Water Cresses a little Sal Ammoniac and Sulphur, and a great deal of Earth. For by the chymical Analysis we obtain from this Plant a great deal of Acid and Alkali, a little urinous Spirit and Sulphur, and a pretty deal of Earth. They affirm, that the Juice of this Plant takes away the *Polypus* of the Nose, and makes it fall off, if it be often washed with it.

Nasturtium hortense, Offic. *Nasturtium hortense vulgatum*, C. B. P. *Nasturtium vulgare*, J. B. *Garden-Cresses*. It is sown in Gardens, flowering in *June*. The Herb and Seeds are used. The Seeds are attenuating, opening and abstergent, and are principally used in Tumours of the Spleen, Obstructions of the Menfes, and expelling the dead Fœtus; they cut the tartarous Mucilage of the Lungs, and are good for the Scurvy and Dropsy. The Herb bruised or parched, and mixed with the Fat of an Hog, cures the Scurf, and scabby Sores of the Head, and other Parts, being anointed therewith. This Herb liquifies the Blood, and renders it acrimonious; whence it is proper, where there is a Coldness and Viscidity; but in hot Distempers it is Poison. It quite eradicates pituitous Diseases, is a good Pectoral for old Persons, where Phlegm hinders Respiration, and is good in hysteric and hyphondriac Cases. The Leaves newly bruised, and mixed with Ferment, heat, and excite a Redness of the Skin, and even a Blister, if their Application be continued for a considerable Time. Where it meets with a sweet viscid Phlegm, and none but cold Humours, with an extreme Laxness of the Solids, in all these Cases it is highly serviceable. The Seeds by a singular Property,

Property, are effectual in Hernia's, whether internally or externally used.

Nasturtium Indicum, Offic. *Nasturtium Indicum majus*, C. B. P. *Indian Cress*. It is a Native of *Peru*, but frequently cultivated with us in Gardens, flowering all the Summer. The Flower is serviceable in a Weakness or Pain of the Stomach, proceeding from Cold and Flatulencies; it is an Ingredient in Sallads, with other Greens. It is also recommended for a stubborn and malignant Itch, and for recent Wounds.

Nepeta, *Mentha Cataria*, Offic. *Nepeta major vulgaris*, Park. *Mentha Cattaria vulgaris* & *major*, C. B. P. *Nep*. It grows in Hedges, flowering in *June* and *July*. The Herb is used, which is of fine Parts, and is principally recommended for Disorders of the Uterus, for Sterility, and to expel the Fœtus, and is sometimes us'd to cut the tartarous Mucilage of the Lungs.

Nephriticum Lignum. *Nephritic Wood*. See *Glans Unguentaria*.

Nerium, Offic. *Nerium sive Rhododendron, flore rubra* & *albo*, J. B. *Nerium floribus rubescentibus* & *albis*, C. B. P. *Oleander*, or *Rose-Bay*. It is cultivated in Gardens, flowering in *July*. This Plant has a Force which is insuperable; for its Juice excites so great and violent an Inflammation, as immediately to put a Stop to Deglutition; and, if it be received into the Stomach, that Part is render'd incapable of retaining any thing, the pernicious Drug exerting its Force, and purging both upwards and downwards. Antidotes against its Poison, are Vinegar, and all Acids.

Nicotiana, *Petum*, *Tabacum*, Offic. *Nicotiana major latifolia*, C. B. P. *Hyoscyamus Peruvianus*, Ger. *Emac*, *Tobacco*. The *Indian* Name of this Plant is *Picelt*. It is a Native of *America*, where it grows spontaneously in great Plenty; with us it is

cultivated in Gardens, flowering in *June*. The Leaves are the Part us'd in Medicine, which are said to absterge, incide, and resolve; to be somewhat astringent and to resist Putrefaction. It is a strong Sternutatory, and Apophlegmatism; and is narcotic, vulnerary, and emetic. The *Edinburgh* Dispensatory has given a Syrup of Tobacco, but this Plant is in general so emetic, cathartic and narcotic, that I think the internal Use of it is never to be allow'd, tho' a Water distill'd from the green Leaves is much recommended for dislodging Stones in the Urinary Passages. *Monardes* informs us, that the *Indians* use the Leaves of Tobacco for curing Wounds; and esteem them an efficacious Remedy in the Head-Achs, *Hemicraniums*, Flatulencies, Stiffness of the Neck, a *Tetanus*, and Pains of the whole Body arising from a cold Cause, if apply'd to the Part affected. The Juice also of Tobacco is much recommended to preserve the Teeth and Gums, and to cure the Tooth-Ach. The Leaves are, farther, esteem'd effectual in *Hysterics* apply'd to the Navel and Region of the Uterus; and in Pains of the Joints, and cedematous Tumors, warm Leaves of Tobacco, or a Cloth dip'd in the Juice, are said to be very effectual. Apply'd to pestilential Carbuncles, these Leaves are said to induce a Crust, and promote a Cure, and to be a present Remedy for the Stings and Bites of Venomous Animals, and for that Poison with which the *Cannabals* tinge their Arrows. A Drop or two of the Oil of Tobacco put upon the Tongue of a Cat, immediately kills it. *Diemerbroek* highly recommends the Use of Tobacco in the Plague, asserting that both at *London* and *Nimwegen* when the Plague rag'd, those Houses that sold Tobacco, escap'd the Infection. We learn from the *Edinburgh Medical Essays*, that

Tobacco

Tobacco, beat well with Vinegar or Brandy into a Mash, and apply'd in a Linnen Bag on the Stomach, occasions strong Vomiting, and has sometimes very good Effects in removing hard Tumors of the Hypochondria. Mr. *Stedman* who communicated this Account, informs us, that he knew two Instances of its making a compleate Cure: One of an old Man, who, by sleeping in the open Air, while the *Serenas*, or Night Dews fell, was taken, in the *West-Indies*, with a Numbness of his whole Body, which soon was followed with Purging and Vomiting; and these going off, he had all the Symptoms of a Jaundice, and Hardness, and Pain, under the short Ribs of the left Side. The Pain went off in a few Days, but the Tumor increased. After he had used Variety of Medicines for five Years to remove this Disease, a Sea Surgeon applied a Poultrice of *Tobacco*, disguised with Green Tea, Sugar and *Cochineal* upon the *Epigastrium* and *Hypochondria*. After this Application had been made four or five Hours, he vomitted a great deal of purulent Matter. When the Poultrice was taken away, the Vomitting ceased. He continued to apply this Mash once a Day for a Month, and was perfectly cured. The other Example was of a Boy, who was cured, much in the same Manner, of an hard indolent Tumour of the Left *Hypochondrium*. The Man had six Ounces of *Tobacco* in his Poultrice; the Boy had only one, and the Quantity must always be regulated by the Age of the Patient. Smoaking and chewing of *Tobacco* have been esteem'd of Service in Disorders, where the Glands of the Fauces, have abounded with Lymph, or where the Constitution in general has been too much loaded with *Serum*; and the same has been said to relieve some Asthmatic Patients, which is not un-

likely, both on account of its Narcotic Quality, and because it evacuates a Part of the superfluous *Serum*; but this can be of no Reason for its habitual Use, especially in those who have no Occasion for it; for in such I apprehend it does a great deal of Prejudice, by drawing off the *Saliva*, which Nature providently prepares, to dilute, and in some Measure to dissolve the Aliments taken into the Stomach; besides, it excites a perpetual Thirst, and tempts the Person, who smoakes or chews, to drink more, than is sufficient for any good Purposes in the Constitution. I have known several People brought into Dropsies and Consumptions by too profuse Discharges of the *Saliva*, excited by smoaking or chewing *Tobacco*; and upon the whole I esteem it extremely prejudicial, unless when it can be made subservient to any good medicinal Purposes; and then like *Opium* it should be used when required only, and left off immediately, when the Necessity for it ceases. And the same may be said of *Tobacco*, consider'd as a Sternutatory, which may answer some Purposes as a Medicine, but it is sure to be prejudicial, when render'd habitual by way of Amusement. But the greatest Use of *Tobacco* in Medicine is in Clysters; for the Smoak of *Tobacco*, convey'd into the Intestines, either by an Instrument contriv'd on Purpose, or blown in by means of a common *Tobacco Pipe*, will stimulate strongly, so as to procure Stools, when every other Method of doing it has fail'd. Hence it is of Service in the Iliac Passions and some Species of Ruptures, attended with absolute Costiveness, and may be employ'd to very good Purposes in other Disorders where a strong and sudden Stimulus is requir'd. And this Method of taking *Tobacco* might, no doubt, by Habit, be render'd equally amusing,

amusing, as smoaking or chewing it; and it has this to recommend it, that it is a much less filthy and nauseous Entertainment.

Nicotiana minor, C. B. P. *Tobacco Anglicum*, Park. *Priapeia quibusdam*, *Nicotiana minor*, J. B. *English Tobacco*. It is sown in Gardens, flowering in *July* and *August*. The Leaves are used, which agree in Virtues with Henbane. The Leaves of this Plant are frequently sold by the Herb Women for the *Mandragora* or Mandrakes, and sometimes for the common Tobacco.

Nigella, Gith, Offic. *Nigella flore minore simpliciter, candido*, C. B. P. *Melanthium calyce & flore minore; semine nigro*, J. B. *Fennel Flower*. It is sown in Gardens, flowering in *July*. The Seed is used, which is attenuating and opening, and is principally used in resolving, and expectorating the Mucilage of the Lungs, for increasing Milk, for provoking Urine and the Menfes, and against the Bites of venomous Animals; it is also esteem'd a Specific in quartan and quotidian Fevers. The Plant is recommended for the Stone in the Kidneys, and for destroying Worms, the Quantity of two Ounces thereof being boil'd in Wine. This is also said to cure the Colic.

Nigellastrum, Offic. *Lychnis segetum major*, C. B. P. *Pseudo-Melanthium*, J. B. *Cockle*. It grows among Corn, flowering in *June* and *July*. The Seed is used, which is heating and drying, and being applied in a Pessary with Honey, provokes the Menfes. It is extoll'd by some as a Vulnerary. A Dram of the Powder of the Seed of this Plant, given to drink in Broth, or Water, for three Mornings, is an excellent Remedy for the Vapours. *Senner-tus* and *Simon Pauli* used the Root of this Plant successfully, to stop Hæmorrhages, even those which happen in continued Fevers. They put

it under the Tongue of the Patient, and left it there for some time.

Nuces de Barbadoes, Offic. *Ricinus Americanus major, semine nigro*, C. B. P. *Barbadoes Nuts*. This grows in Barbadoes, and other Parts of the *West-Indies*. The Fruit is oblong, oval, of the Size of a small Bean, having one Side convex, the other depress'd, including under a hard Pellicle a white Kernel. It agrees in Virtues with the *Ricinus vulgaris*.

Nummularia, Offic. *Nummularia major lutea*, C. B. P. *Nummularia Centimorbia*, J. B. *Money-wort*. It grows in watery Places, flowering in *May*; the Herb is used, the Juice of which partakes of the Nature of *Becabunga*; for it has as a sponaceous, aromatic and balsamic Taste: Hence it has the same Virtues. It has an Acrimony, which is not ungrateful, mix'd with somewhat aromatic, and of an astringent acid Taste. Hence, it works the same Effect as *Scurvy-Grass*, mixed with *Sorrel*, which we use when we are apprehensive of spitting of Blood. For this Reason it is proper in all Sorts of Scurvy, where the Humours are to be render'd more fluid without danger of too great a Resolution, or Tension; for Instance, in an excessive Flux of the *Menfes*, where a total Stop would it succeeded by an Inflammation, and yet the immoderate Evacuation requires to be restrained, for which purpose this Herb is very proper. A Decoction of the Leaves, in Wine sweeten'd with Honey, is good for Ulcers of the Lungs, the *Fluor Albus*, *Diarrhæa*, *Dysentery*, *Asthma*, Spitting of Blood, *Hæmorrhoids*, and the dry Coughs of Infants. The Powder of the Leaves is good for an *Hernia* in Infants; and the Leaves bruised, and applied in the Form of a Cataplasm, cleanse and dry up fetid Ulcers. This Plant resists Putrefactions;

factions, generates Pus, is corroborative, and cures many Diseases. For the *Arthritis*, *Podagra*, Scurvy, Dropsy, and Jaundice, take an Ounce or two of the Juice in the Morning fasting; it is opening, and purges by Stool and Urine.

Nux Avellana sylvestris, Jons. Dendr. *Avellana*, Offic. *Corylus sylvestris*, Ger. Emac. The Hazel. This is very frequent in Woods and Hedges, and there are many Species of it, which all agree in medicinal Virtues. The *Juli* or Catkins, and Shells of the Nuts, are said to be astringent and binding. The Kernels are said to load the Stomach, to be of difficult Digestion, and to render the Head heavy; some affirm, that they are binding, and consequently good in a Dysentery; others, on the contrary, assert that they are loosening. They are esteem'd pectoral, and the Oil by Expression is recommended by *Tragus* for a Cough. The Cream of these Nuts is good in the Stone and Heat of Urine. Emulsions may be made of them. *Quercetan* gave a Dram of the Powder of Nutshells, mixed with an equal Quantity of prepared Coral, in a Glass of the Water of *Carduus Benedictus*, or Corn Poppy, in the Pleurisy.

Nux Juglans, Offic. *Nux Juglans sive Regia vulgaris*, C. B. P. The Walnut-Tree. The Catkins appear in March, and the Nuts come to Maturity in Autumn. The Bark of the Tree, the Catkins, the Nuts, and the stony Substance which lies betwixt the Lobes of the Kernel, and the external *Putamen* or green Hulls, are us'd in Medicine. The recent Nuts are said to heat and dry, and to be a Preservative against the Plague. The *Putamen* or green Hull is gently emetic. The internal Bark of the Tree taken off while succulent and dry, excites Vomiting pretty powerfully; and the *Juli* or Catkins, do the same, but in

a milder Manner. Their principal Use is in Cholic and Nephritic Pains; they are also said to stop a Diarrhæa. The recent Nuts excite Stools; when dry they are more hot, difficult of Digestion, and exasperate a Cough. Two or three immature Walnuts preserv'd with Sugar are said to excite Stools. And the Nuts eaten in a Morning, are esteem'd a Preservative against Poisons and contagious Distempers. A *Pediluvium*, prepar'd of the Leaves, is by some recommended in the Gout; and these Leaves are also said to cure inveterate Ulcers. The fungous Substance which lies between the Lobes of the Kernel, dry'd, powder'd, and exhibited in Wine, is reported to have been of infinite Service, in an epidemical Dysentery, which rag'd among the *English* Forces in *Ireland*, and resisted all other Methods. This Substance is also recommended, in the Quantity of a Dram for a Dose, in a Pleurisy, and is reckon'd a Specific in a Cancer, if long continued. A preserv'd green Walnut, cures the Hiccups, perhaps more effectually, than any other Medicine.

Nux Moschata, Offic. *Nux Moschata*, *Nux Myristica*, *Nucista*, Mont. Exot. The Nutmeg-Tree. It grows spontaneously in the Island of *Banda*, in the *East-Indies*, in great Plenty. It is as large as a Pear-Tree, bearing fragrant Leaves somewhat resembling those of the Peach-Tree. The Fruit is about the Size of a small Peach, cover'd with a soft juicy Hull like a Walnut; immediately under this is found the Mace, which closely adheres to the subjacent hard, woody Shell, which incloses the Nutmeg. Nutmegs are heating, drying, and somewhat astringent, stomachic, cephalic, and uterine; they discuss Flatulencies, help Digestion, mend a fetid Breath, are reviving to the *Fœtus* in the Womb, are excellent in Faintings, and Palpitations of the Heart,

Heart, diminish a tumid Spleen, restrain *Diarrhæas* and *Dysenteries*, and stop Vomitings. The Fruit is brought to us preserv'd from *India*; but these eaten to Excess, are said to have a narcotic Quality, and to produce a Delirium, or Sort of Intoxication. The same Virtues with those of Nutmegs are ascrib'd to Mace; but because its Parts are more small and minute, it is thought to operate more effectually, and to be possess'd of a more penetrating Quality than Nutmegs. The *Oleum Nucis Moschatæ*, or as it is improperly called *Oil of Mace*, is the Oil of the Nutmeg by Expression: That is best which is brought from the *East-Indies* in *China-Jars*, of a thick and pinguious Consistence, of the Colour of Mace, and of a fragrant Smell; but this is seldom met with in the Shops; instead of it we generally meet with another Sort brought from *Holland*, in square Masses, of a harder Consistence, a paler Colour, and less fragrant Smell; but this is not near so good as the former. The genuine Oil of Mace by Expression is made in the *East-Indies*, from the Mace whilst recent, whence it is brought to us in Glass-Bottles, but it is a very rare Commodity. What is genuine is liquid, of a red Colour, smelling strongly of Mace, of a pungent Taste, and somewhat thicker at the Bottom of the Vessel than at the Top. What is commonly sold for Oil of Mace in the Shops, is a Kind of factitious Oil, or Unguent, made of Sheep's Suet, Palm Oil, and the like Ingredients, scented and colour'd with Oil of Nutmeg. This is by no Means equal to true Oil of Mace in Efficacy, and ought to be a very cheap Ingredient, as it is pretty insignificant.

Nux Pistacia, Offic. Park. Theat. *Pistacia*, J. B. *Pistacia peregrina* fructu racemoso sive *Terebinthus Indica* Theophrasti, C. B. P. The *Pista-*

chio, or Pistick Nut-Tree. This Tree grows in hot Countries. The Nuts are us'd, which are heating, moistening, attenuant, and aperitive. They are principally used in mucilaginous Infarctions of the Lungs, and Obstructions of the Liver; they strengthen the Stomach, repress a Nausea and Vomiting, excite an Appetite, and afford good Nutriment; and *Dioscorides* affirms, that if bruised and taken in Wine, they are effectual against the Bites of venomous Reptiles. Those are best which are recent, ponderous, and not rancid.

Nux Virginiana, Offic. *Prunifera*, vel *Nucifera*, seu *Nuciprunifera Arbor Americana præcelsa, angustis Lauri foliis latè virentibus, Massichen odoratum fundens*, Sloan. Hist. Raii Dendr. The *Virginia-Nut*. It grows in *Barbadoes*, and the Fruit is us'd, which is nearly of the Shape and Size of the Kernel of a Filbert, smooth, of a brown Colour, with an Eye near one End, and containing an hard Stone; which incloses a white, globular Kernel, of a bitterish Taste, and aromatic Smell. It potently opens Obstructions, depurates the whole Mass of Blood, and corrects a scorbutic and bad Habit of Body, by impregnating the vital Liquor, the Blood, with those volatile Salts, which exalt it from its low and vapid State to a more pure and spirituous one; and by that Means, preserve it from Stagnation. It, also, clears the Skin of Spots, and all other Defecations.

Nux Vomica, Offic. Ger. Emac. *Nux Vomica*, in Officinis, C. B. P. *Vomic-Nuts*. These grow in *Malabar*, but are not, or at least ought not to be, us'd in Medicine, for they are extremely narcotic and virulent, exciting Inquietudes, Rigors, Convulsions, Horrors, Tremors, and an irregular Respiration. They are principally used for poisoning Dogs, Cats, Crows, and other Animals.

by a Barbarity peculiar to Mankind.

Nymphaea alba, Offic. Ger. Emac. *Nymphaea*, *Nenuphar*, Chab. White Water-Lilly. It grows in Rivers, and flowers in July. The Root, Leaves and Flowers are used in Medicine. The Root, refrigerates and dries, and the Leaves and Flowers, refrigerate and moisten; all are us'd in Fluxes of the Belly, nocturnal Pollutions, against Acrimony of the seminal Fluid, and too great Heat and Thinness of Blood. The Leaves are said to be a good Application for hot Tumors and Inflammations. By the chymical Analysis it yeilds a good deal of Acid, and very little concreted volatile Salt; so that it is no Wonder it should be sweetening. The Roots are frequently us'd in cooling Ptifans, for a Heat of Urine, and Inflammation of the Kidnies, and other Bowels. There is a Syrup prepar'd of this Plant, which is said to be a little narcotic. Many are very cautious of using this Plant, for fear of extinguishing all amorous Desires, and rendering themselves impotent; for it is found by Experience, they say, that the Use of the Seed and the Root, renders Persons very cold and dull as to venereal Inclinations. *Pliny* writes, that they who take it twelve Days successively, find themselves deprived both of the Seminal Fluid, and the Power of Coition. The Root of this Plant, boiled in black Wine, and drank, stops the immoderate Flux of the Menfes, even when the Disorder has been regarded as desperate.

Nymphaea lutea, Offic. Ger. Emac. *Nymphaea major lutea*, C. B. P. This grows frequently in Rivers, flowering in July. The Root, Leaves, and Flowers are used, which agree in Virtues with those of the preceeding.

Ocymoides, Offic. *Ocymoides album multis*, J. B. *Lychnis Sylvestris flore*

albo, C. B. P. Wild White-Campion. It grows among Corn, flowering in the Summer. The Seed is used. It is drying, and of fine Parts, and cures the Bites of Vipers, and other Serpents. It is good in a *Sciatica*, and being boild in Posset-Drink is an excellent Remedy for Convulsions in Children.

Ocymum. See *Basilicum*.

Oenanthe Petroselinii folio, *venenosa*, Offic. *Oenanthe succo viroso*, *Cicutæ facie Lobelii*, J. B. *Filipendula Cicutæ facie*, Ger. Emac. Hemlock-Dröpwort. It is very frequent in watery Places, especially about Bath, flowering in June. The Plant is extremely poisonous and malignant, especially the Root, which however us'd to be sold by the Herb-Women in London, for the Roots of Piony. The Plant is so poisonous, that if tasted, it causes immediate Death with Convulsions, as it happen'd at the Hague, where two Men went out a Simpling, and finding this Plant, tasted it: One of them was immediately taken with Convulsions, and died on the Spot; the other soon after. Some such Instances we have in *Stalpart Vander Wiel's* Observations, where Persons have died within two Hours, after only tasting this Plant, which affects the Brain, so as to cause Convulsions, and is so quick in Operation, as scarce to give Time for a Remedy. The Root has an acrid and unpleasant Taste; it yeilds at first a milky Juice, but afterwards a yellow, virulent, poisonous, and fetid one. The Plant taken inwardly, immediately excites an extreme Pain in the Stomach, with such violent Convulsions, that the Jaws become immoveable; and a frequent Hiccup succeeds, with fruitless Efforts to vomit, and a copious Hemorrhage from the Ears. The only Remedy in this Case is for the Patient to swallow great Quantities of Oil, Butter, or Milk, that the acrid Particles

cles may first have their Points sheathed, and afterwards be evacuated by the upper or lower Passages.

Oenanthe aquatica, C. B. P. *Filipendula aquatica*, Ger. Emac. Water Dropwort. It grows in moist Meadows, and watery Places, and is said to be resolvent, and friendly to the human Body; but it is very little us'd, and I don't find that Authors are much acquainted with its Virtues.

Oenoplia. The great Jujube is thus call'd.

Olea, Offic. *Olea sativa*, Ger. Emac. The Olive-Tree. This is a large Tree growing in hot Countries, flowering in *June*. The Leaves are refrigerating, drying, and astringent, and are principally us'd in profuse Fluxes of the Belly, and of the Uterus; they are also esteem'd a good Application in an *Herpes*. The Fruit, or Olives, are pickled and brought to us; being gather'd before they are ripe. We have generally of two Sorts, the *Spanish* Olives, which are as large as a Plumb, and are somewhat bitter; and the *Luca* Olives, which are less, but milder. These eaten at the Beginning of a Meal, are said to increase the Appetite, to render the Belly soluble, and to dry and comfort a Stomach when too moist. An Oil is express'd from the immature Olives, which is called *Omphacinum*, which is esteem'd refrigerating, drying, and astringent. But the Oil express'd from the ripe Fruit, is of more general Use, being what we call *Olive*, or *Sallad*-Oil. It is warming, and moistening, emollient, digestive and vulnerary; it relaxes the Belly, is good for Dryness, and Strictures of the Breast, mitigates Gripes, mollifies, and relaxes the urinary Passages, and abstersges and heals Erosions. It has lately been found by Experience, to be an absolute Cure for the Bite of a Viper, if well rubb'd into the

Part wounded, before the Fire, and is at least; as effectual as the Oil of the Viper. Now as the viperine Poison, acts by coagulating the Blood in the Veins from the Part first affected towards the Heart, Oil in this Case must produce its salutary Effects, by preventing such Coagulation. This Circumstance, together with the frequent Use of Oils and Unctions, among the antient Physicians, especially those of the methodic Sect, makes me strongly suspect, that the external Use of Oil may be very powerful in preventing Coagulations of the Blood, when it is dispos'd to run into Concretions from other Causes besides the Bite of a Viper.

Oleaster, Offic. *Olea Sylvestris*, Ger. Emac. The Wild-Olive-Tree. It grows spontaneously in *Italy*, *Spain*, and many other Countries, and the Leaves are us'd, which in Virtues agree with those of the preceeding Olive.

Olibanum, & *Thus masculum*, Ind. Med. *Thus*, five *Olibanum*, Offic. C. B. P. Frankincense, or *Olibanum*. This is a resinous Substance, of a pale yellow Colour, somewhat hard and pellucid, form'd into small Drops like Mastick, of a bitterish resinous Taste, and fragrant Smell. It drops spontaneously from the Tree which produces it, and is transported to us from *Turky* and the *East-Indies*. That which is in small Drops, is preferable to the other Kinds. It is heating, drying, and subastringent. It is principally us'd internally, against various Disorders of the Head and Breast; as, also, against Fluxes and Hæmorrhages of the Uterus, Coughs, Vomitings, Spittings of Blood, Diarrhæas, and Dysenteries. Externally, Fumigations of it corroborate the Head. It dissolves Catarrhs, incloses hollow Ulcers, and brings them to a Cicatrix. It conglutinates recent Wounds, especially

cially those of the Head. It cures Chilblains, and mitigates malignant Ulcers, not only of the *Anus*, but, also, of other Parts. It also, removes Redness and Inflammation of the Eyes, and carries off beginning Warts, and Impetigo's. What we call the *Manna Thuris* of the Shops, are Fragments of the Frankincense, as small as Meal, produced by the Collision of the Bags with each other during the Carriage. But others by the *Manna Thuris*, mean small Portions of the Frankincense. Nothing certain is left upon Record, with Respect to the Tree which bears the Frankincense. *Theophrastus* informs us, that it is not a very large Tree; that it is about five Cubits high, full of Branches, with Leaves resembling those of the Pear Tree, and a smooth Bark, like that of the *Bay-Tree*; but, says he, others affirm it to be like the *Mastich Tree*; bearing similar Fruit, and a reddish colour'd Leaf, whilst others assert, that both its Leaves and Bark resemble those of the *Bay Tree*. *Diodorus Siculus* ascribes the Form of the *Egyptian Thorn* to the Tree which bears the Frankincense, and the Leaves of the Willow. *Garcias* informs us, that this is a low Tree, whose Leaves resemble those of the *Mastich-Tree*: But *Thevetus* tells us, that it resembles the *Resin-bearing Pines*. Mr. Ray also says, that we are still uncertain of the true Form of this Tree.

Omphacium. The Juice of unripe Grapes. The Antients used to expose the Grapes to the Sun some Days, and then press out their Juice into large Vats; and, in the Time of *Dioscorides*, they used to let it stand in them, exposed to the Sun, till most of the Humidity was exhaled, and the Remainder inspissated into a Rob. This *Dioscorides* recommends, with Honey and *Pasum*, for Ulcers and Relaxations of the Tonils, Uvula, Mouth, and

Gums; and for Purulencies of the Ears; for Dysenteries, and Uterine Fluxes, in Clysters, or Injection. He farther says, it clears the Sight, and cures Asperities of the Angles of the Eyes; and that it is good for a recent Spitting of Blood, from a Rupture of a Vessel; but, in this Case, it must be taken in a small Quantity, because it corrodes powerfully.

Onagra, Offic. *Chamaenerium latifolium vulgare*, Tourn. Inst. Rose Bay, Willow-Herb. This grows in Mountains, flowering in July. The Root is said to be a good Application for malignant Ulcers.

Onobrychis, Offic. *Caput Gallinaeum Belgarum*, Merc. Bot. *Polygon. Gesneri*, J. B. Medic. Vetchling, or Cocks Head, commonly but falsely called Saint Foin. It grows in chalky Soils, and in Meadows, flowering in June and July. The Herb is used, which being bruised and apply'd, dissolves Tubercles; taken in Wine, it cures the Strangury; and rubbed on the Skin with Oil, provokes Sweat.

Onosma, Offic. *Lycopsis Anglica*, Ger. Emac. *Echium alterum*, Merc. Bot. Stone Bugloss. The Leaves taken in Wine expel the *Fætus*, according to *Dioscorides*. Dr. Sherard is said to have found this Plant in the Island of *Jersy*.

Ophioglossum, Offic. J. B. *Ophioglossum vulgatum*, Boerh. Ind. Alt. Adders-Tongue. It grows in Meadows, and moist Pastures; and the whole Plant is used, which is esteem'd an admirable Vulnerary both internally taken and externally apply'd. It is particularly recommended in Ruptures.

Opium. This is an inspissated Juice, of a blackish brown Colour; sometimes reddish, of a bitter Taste, and a very disagreeable Smell. The Greeks distinguished two Kinds of it; one got by wounding the *Papaver album*, Offic. the other by Expression.

sion. The *Opium* which we have, is of the first Kind; and as it was cultivated formerly in *Egypt*, near the City of *Thebes*, it has acquir'd the Name of *Opium Thebaicum*. If we may believe *Kempfer*, all the *Opium* now used in the East, is what transudes spontaneously from the Plants in *Natolia*, and other Places. But *M. Tournefort*, and several other modern Travellers, could find no such *Opium* among the *Turks*, all that they met with being the same with what is brought to us in soft Lumps. They, also, observe that the sober People among the *Turks*, seldom take above a Dram in a Day; and a few Grains of that Quantity are always mix'd in their Coffee. In the Empire of the great *Mogul*, *Opium* is sold as commonly in the Shops, as *Tobacco* with us. The Inhabitants prepare it in different Manners, and mix it with different Ingredients, such as *Rhubarb*, the Extract of *Rhubarb*, and the like. Some add to it other narcotic Substances, such as the *Datura*. This last is generally the Artifice of the Quacks, by which they who take this, are thrown into pleasing Dreams, which they take for *Ecstasies*, and believe to be real. *Kempfer* relates many wonderful Effects of this Preparation, which he terms the *Indian Nepenthe*. The Effects of *Opium* are always narcotic, whether taken inwardly, or applied externally; and it has been found to cause Sleep, when given in a Clyster, better than when taken by the Mouth. When applied to the Eyes and Ears, it has caused Blindness and Deafness; and *Galen* relates, that an *Opium* Plaister, laid on a *Gladiator's* Head by a Stratagem of his Enemy, killed him in a little Time afterwards. This Author, also, says, that he never used *Opium*, except in very pressing Cases. *Opium* does not make the Pulse quicker or harder, than it was before; but only greater, and

heats very much; which is a sure Proof, that it dissolves and rarefies the Blood; and this appears also from its causing an Itching in the Skin, and sometimes Sweat. It is observed of the *Turks*, who are killed in Battle, that as soon as their dead Bodies are removed from the Places where they fall, they begin to bleed, their Blood being made more fluid by the *Opium* which they take. By this Rarefaction of the Blood in the Vessels, the Nerves which lie near these Vessels, are compress'd; and thus the Course of the animal Spirits is stopt, as is, also, the Secretion of many Fluids, such as the Bile and Urine, which occasion Costiveness, and the making of very little Water. *Opium*, in all probability, acts by its narcotic Sulphur, which divides and rarefies, in an extraordinary Manner, the sulphureous Parts of the Blood: And accordingly we observe all Vegetables, which contain an Oil of this Kind, such as *Nutmeg*, *Saffron*, and the like, produce in the Body an Effect of the same Nature with that of *Opium*. Neither is it at all improbable, that Sulphurs should be capable of a very great Degree of Rarefaction, since the Smell of Musk, or *Ambergriſe*, may extend through so large a Space. *Pitcairn* was of Opinion, that the Effects of *Opium* were owing to its volatile Salt; but it seems to contain that Principle in too small a Quantity for such Operations. When a Person has taken too great a Quantity of *Opium*, the first thing to be done is to empty the Vessels by copious Bleeding, if the Patient's Strength can bear it. The next Thing is to drink acid Liquors, such as *Vinegar*, *Lemonade*, *Syrup of Barberries*, and such like, which coagulate the Blood, and thus give the Vessels room to contract. Smelling to *Vinegar*, and all Aromatics, is also proper; and, if the Stupor be very

great, Scarifications ought to be made, and Vinegar and Salt sprinkled upon the scarified Parts. Blisters and sharp Clysters answer the same Effect. The Rules to be observ'd in taking *Opium* are these: (I.) If the Patient be plethoric, he ought not to take *Opium*, till he has lost some Blood. (II.) It ought not to be given in the Time of the *Menses* and *Lochia* of Women, nor during the usual Flux of the *Hæmorrhoids* in Men, because it stops all these natural and healthful Evacuations. Neither ought *Opium* to be given in every *Diarrhœa*, because, if it be critical, the Stoppage thereof may be very hurtful. It must, also, be very improper in a Suppression of Urine, and the general Rule is, that, when the Suppression of any one Evacuation by *Opium* is foreseen, other Evacuations, especially by Bleeding, ought to succeed. (III.) *Opium* ought never to be taken on a full Stomach, because it hinders Digestion, and proves, commonly, emetic. The Digestion ought, therefore, to be completed at the Time of taking it; and the same thing is to be said of all other Narcotics, which given unseasonably, and for a long Continuance of Time, quite destroy the Appetite, bring on Hiccups, Nauseas, and habitual Vomiting. (IV.) Persons who begin to take *Opium*, ought to venture only on a very small Quantity at first, because the Effects of the same Quantity on different Persons are very different; and there is no Way to determine, but by Experience, how much any Person can bear. Half a Grain has been found to cause Sleep for twenty four Hours together, to a Person, who, afterwards, required half a Dram to produce half that Effect. For it is a certain Observation, that they who accustom themselves to take *Opium* habitually, must often increase the Dose, otherwise it gradually looses its Effect on them;

and the elder *Geoffroy* knew a Woman who took seventy two Grains every Day, merely to ease the Pain of a cancerous Breast. The common Quantity among the *Turks* is a Dram in a Day; but some take much more. The Antients were extremely cautious in giving *Opium*; but in the Beginning of the last Century, *Felix Platerus*, a learned Physician of *Basil* in *Switzerland*, began to bring the Use of it in Vogue. *Sylvius de le Boe*, perfected what *Platerus* began; and, from that Time, many of the most famous Physicians in *Europe*, such as *Sydenham*, and others, found, by certain Experience, that it was one of the most valuable Medicines in the World, when prudently administer'd, in calming the too violent Motion of the Blood, and easing Pain. There are, however, still some very great Men, who continue Enemies to *Opium*; and among these *M. Stahl* has declared himself, in his Dissertation *De Imposturis Opii*. They are afraid to use it for the Ends just mentioned, for fear of suspending the Crises which commonly happen after violent Pains, such as those of the Gout and Rheumatism; and in acute Distempers, in which the Fluids are violently agitated, they apprehend, that by giving *Opium*, to diminish these Motions, they only throw a Veil over the Distemper, which hinders them from observing its true Genius, and the Tendency of Nature in the Course of it. Of this they cite Pleurisies as an Example; and they are certainly in the right, not to give *Opium* in that Disease. But notwithstanding all the Strength of these and other Reasons, against the Use of *Opium*, and the Authority of those who advance them, this Medicine is undoubtedly very proper on many Occasions, as in great Want of Sleep, too great Motion of the Fluids, occasioned by Purgative, and other Kinds of Medicines, in great Desfluxions, and in

flub

stubborn Coughs. But the principal Uses of *Opium* are in a Fit of the Stone, and a Retention of the Secundines on Account of a Stricture of the Uterus. For *Opium* by removing Pain and Stricture, relaxes the Part, and affords a Passage to the Body which ought to come away. *Opium* is certainly of some Use in Medicine; but the Abuse of it is very great and destructive; and a hundred times more is used in *England*, than ought to be.

Opoponax. See *Panax Heracleum*.

Opuntia, Offic. *Ficus Indica*, Ger. Emac. *Tuna Indorum*, Jonf. Dendr. The prickly Pear-Tree. The only Parts of this Tree, which are used, are the Fruit and Leaves; which are of a refrigerating and moistening Quality, and good for extinguishing burning Fevers, and allaying Thirst.

There is another Plant of this Name distinguish'd, *Opuntia maxima*, folio oblongo, rotundo, majore, spinulis obtusis, mollibus, & innocentibus, obfiso flore striis rubris variegato, Cat. Jam. *Cochinillifera*, Offic. The *Cochineal Tree*. It grows in *America*, and is remarkable for nothing in Medicine, but giving Nourishment to those Insects, which we call *Cochineal*.

Orchis. See *Satyrium*.

Oreoselinum, Offic. *Apium montanum vulgatius*, Park. Theat. *Petrofelinum montanum*, Offic. Schrod. Mountain Parsley. It grows in the mountainous Parts of *Germany*, and is found in great Plenty on the Sides of the Mountain *Gurca*, not far from *Geneva*; the Root and Seed are used. As to its Virtues, it is of an heating and drying Quality; and is alexipharmic, sudorific, diuretic and discutient. Its principal Use is in the Stone of the Kidneys and Bladder; in the Plague, Flatulencies and the Strangury.

Oreoselinum, *Apii folio*, majus. Tourn. Inst. *Gentiana nigra*, Offic. Germ. *Daucus montanus Apii folio major*, C. B. P. *Libanotis Theophrasti nigra*, Ger. Emac. Mountain Dauke. It grows in the mountainous Parts of *Italy*, flowering in July. The Seed is used, which is of an heating, opening, and inciding Quality; provokes Urine, and the Menfes, expels the Foetus, and discusses Tumours.

Origanum Creticum, Offic. Ger. Emac. *Origanum sylvestre sive vulgare*, Park. Theat. Origany of Crete. It grows in the Island of *Crete*, flowering in June. The Flowers are used principally in Obstructions of the Lungs, Liver, and Uterus. Dale remarks that in Prescriptions, the *Cretan Origanum*, is not sufficiently distinguish'd from the common *Origanum*; and farther says, when the Flowers of *Origanum* are order'd, those of the *Cretan Origanum* are understood; but when the Herb is directed, common *Origanum*, or Wild Marjoram is meant; for the Leaves, or Herb of the *Cretan Origanum* are never to be found in the Shops. The Oil of *Origanum* is extremely hot, and seldom used inwardly, except for the Tooth-ach, in which Case it is put upon some Lint, or Cotton, and apply'd to, or held near the Part affected.

Origanum Heracleoticum, Offic. Ger. Emac. *Origanum Heracleoticum*, *Cunila gallinacea Plinii*, C. B. P. Bastard Marjoram. It is cultivated in Gardens, flowering in the Summer. The Herb is used, which is esteem'd heating, and good against the Bites of Serpents, and according to *Dioscorides* is given in Contusions, and for Dropsies.

For an Account of common *Origanum*. See *Majorana*.

Orleana, Offic. *Achiote seu Medicina tingendo apta*, Hern. *Metella*
D d 3 *Ameri*

Americana maxima Tinctoria, Tourn. Inst. Arnotto. This is cultivated in *New-Spain*, and *Brasil*, and the Tincture of the Fruit, or a Kind of Colour made of it, is used in making Chocolate; for this Purpose they take the ripe Fruit, and infuse it in hot Water, and make up the Sediment into Lozenges, or dye Wool with it, which is used as a Fucus or Paint, and is called *Spanish Wool*. This Tincture of the Fruit, diluted with Water and drank, or applied by Way of Fomentation externally, is said to mitigate febrile Heat, to stop bloody Stools, and discuss Tumors.

Ornithopodium, Offic. *Ornithopodium majus & minus*, C. B. P. Birds Foot. It grows in sandy and gravelly Places, flowering in Summer; the Herb is used, which breaks and expels the Stone in the Kidneys and Bladder, and is effectual in an *Hernia*.

Ornithopodium Portulacæ folio, Tourn. Inst. *Scorpioides*, Offic. *Tephium Scorpioides*, J. B. Scorpion-Wort. It is cultivated in our Gardens, flowering in the Summer; the Herb is used, which is of a heating and drying Quality; and is, according to *Dioscorides*, a present Remedy, against the Sting of the Scorpion, being apply'd to the Part.

Orobanchæ, Offic. *Orobanchæ major*, *Garyophyllum elens*, C. B. P. *Orobanchæ*, *juve Rapum Genistæ*, Ger. Emac. Broom-Rape. It grows in gravelly and dry Places, flowering in *June* and *July*. The Herb dry'd and pulveriz'd, is a present Remedy for the Pains of the Colic, and being preserv'd, or its Syrup, it is of excellent Use in splenetic and hypochondriac Disorders; and an Ointment prepared of the same, is good to soften hard and scirrhus Tumors.

Orobis, Offic. *Orobis sylvaticus foliis oblongis, glabris*, Tourn. Inst.

Astragalus sylvaticus, Ger. Emac. Wood-Peafe, or Heath-Peafe. It grows in woody Places, and in Thickets, flowering in *April*. The *Tubera* of the Root, is used by the *Scottish* Highlanders, in the same Disorders of the Thorax for which Liquorice is proper. *Hippocrates* recommends this Plant in the Pleurisy, Peripneumony, and nephritic Disorders; for which Purposes, let the Seeds be roasted and bruised, and then have hot Water poured upon them; after this, it must stand a Night, and then be sapt hot, with an Addition of *Oxymel*. This Liquor is said to be lenitive, and of a penetrating Virtue; but whether this be the *Orobis* of the Ancients, is a Question. The Seed of this Plant, on Account of its farinaceous and mucilaginous Quality, answers to *Fennugreek*, in mollifying and maturating Abscesses; and, by Virtue of its diuretic Salt, which it contains in common with other leguminous Plants, it is of Service in provoking Urine, and expelling Gravel.

Oryza, Offic. C. B. P. Rice. This is a Food of at least two thirds of Mankind. It is the Grain principally us'd in all Parts of the *East-Indies*, in *Persia*, in the *Mogul's* Country, in *Turky*, and all over *Africa*, besides what is now us'd by the *Europeans*, and *Americans*. By this it should seem to be an exceeding wholesome Aliment. It is somewhat restraining, and for that Reason is prescribed in Dysenteries, the *Cæliac* Passion, *Diarrhæas*, and wherever there is too great a Solubility of the Belly. It has been said, that living too much upon Rice, is injurious to the Eyes, and inclines to Blindness; but this I look upon as a vulgar Error, depending entirely upon an Observation made by the Sailors, that Fowls carry'd on Ship-Board from the *American Continent*, to *Jamaica*, which are fed on Rice during the Voyage,

Voyage, are very subject to become blind; but nothing is more common, than to ascribe Effects to wrong Causes; and this is probably owing to some other Cause, in which Rice is in no Degree concern'd; I dont however find, that the Inhabitants of those Countries, where Rice is the almost constant and only Food, are more subject to Blindness than the Europeans.

Osmunda regalis, *Filix florida*, Offic. *Osmunda regalis sive Filix florida*, Park. Osmund-Royal. It grows in marshy boggy Places, and in moist Woods. The Root is used in Medicine, which is blackish without, and white within, of a subacid and somewhat bitter Taste, and grateful Smell. It is in much Esteem, in Ruptures and Ulcers, and is reckon'd a Specific in the Rickets.

Osyris, Offic. *Osyris frutescens baccifera*, C. B. P. *Cassia Poetica Labelli*, Ger. Emac. Poets Rosemary. It grows in Italy, and France, flowering in May. The whole Shrub is used, which is astringent, and is used in some Shops, instead of the *Cassia* of the Ancients, but it must have contrary Effects, as appears from its astringent Taste, and be more proper for Fluxes of the Intestines.

Othonna, Offic. *Tagetes Indicus minor simpliciflore*, sive *Caryophyllus Indicus*, sive *Flos Africanus*, J. B. African Marygold. It is sown in Gardens, flowering in the Summer; the inspissated Juice is used, which according to *Dioscorides* is proper for the Eyes, in Cases that require cleansing; for it has a biting Quality, and absterges whatever may dim, or cast a Mist before the Pupil of the Eye.

Oxalis, Sorrel is so called. See *Acetosa*.

Oxyacantha, this is the *Spina Alba*, or Haw-thorn.

Oxycedrus, A Species of Cedar. See *Cedrus*.

Oxycoccus, Offic. *Oxycoccus sive*

Vaccinia palustris, J. B. *Vitis Idæa palustris*, C. B. P. Moor Berries. This Plant grows in marshy, and putrid Soils, flowering in June. The Fruit is used, which stops a Looseness, and Vomiting, quenches Thirst, strengthens the Stomach, mitigates the Heat in Fevers, and resists the Pestilence.

Oxylapathum, Sharp-pointed Dock. See *Lapathum*.

Oxys. A Name for the *Acetosella*, or Wood-Sorrel.

Padus, a Species of Cherry. See *Cerasus*.

Pæonia mas, Offic. *Pæonia mas præcocior*, J. B. Male Piony. It grows in Gardens, flowering in May, and is said to take its Name, from *Pæon*, a Physician, who with this Plant, as *Homer* says, cured *Pluto*, when he was wounded by *Hercules*. The Root, Flowers, and Seeds of this Plant discover, by the Taste, an aromatic and somewhat astringent Quality, attended with a Viscidity; whence it is effectual in all Disorders, proceeding from too great Laxness of the Brain, and in nervous Affections. A Dram of this Root, given every Morning to an epileptic Person, will prevent the Fit; but, as soon as you desist from giving it, the Fit returns, for Piony has not Virtue sufficient for eradicating an Epilepsy. The Root is hung about the Necks of Children, to prevent an Epilepsy; and the Seeds, are strung as Beads, to make a Necklace for the same Purpose. This Plant is also greatly commended in all Sorts of Convulsions, Palsies, Tremblings, nocturnal Frights in Children, and Apoplexies, for Obstructions of the *Menses*, for a Retention of the *Lechia*, to mitigate After-Pains, and for Obstructions of the Liver.

Pæonia fæmina, Offic. Female Piony.

Pæonia, Offic. Common Piony.

Pæonia flore albicante, Offic. White flowered

flowered Female Piony. These three last Species of Piony grow in Gardens, flowering in May, and agree in Virtues with the *Pæonia mas*, or Male Piony.

Paliurus, Offic. *Paliurus Dodonæi*, Tourn. Inst. *Rhamnus folio subrotundo fructu compresso*, C. B. P. Christ's Thorn. It is a Native of Italy, flowering in May and June; the Fruit being ripe in Autumn. The Leaves, Root, and Fruit are used. The Leaves and Root are astringent, stop a Looseness, and digest, and cure Tubercles; and the Fruit is so powerfully inciding, as to diminish the Stone in the Bladder, and promote Excretions from the Breast and Lungs.

Palma, Ger. Emac. *Palma major*, C. B. P. *Indis Mabaindi*, Herm. Mus. Zeyl. The Palm, or Date-Tree. It grows in Egypt, and other hot Countries. The *Vagina*, or Sheath, which incloses the Flowers and Rudiments of the Fruits, was called by the antient Writers, *Elate* and *Spatha*, and that tender and medullary Substance, which grows on the Top of the Palm-Tree, call'd by *Theophrastus*, *Ἐνκεφαλός*, (*Encephalus*) the Brain, and by *Dioscorides*, improperly, *Ἐνκαρδιον πρέμνυ*, (*Encardium Premnu*) the Heart and Marrow of the Trunk, is nothing but a large Bud, producing, as *Theophrastus* himself says, both Leaves and Fruit; if the Tree be deprived of this Part, it is rendered barren, and, in a short time, perishes: It appears, in many Places of the antient Writers, that this Part is eatable; and *Xenophon*, in his second Book of his Expedition of Cyrus, says, that the Soldiers, in such a Place, first fed on the Bark of Palm-Trees, which all wither'd after being deprived of it. The Date is a round longish fleshy Fruit, of a yellow Colour, but frequently reddish on one Side, of a pleasant sweet mucilaginous Taste, inclosing in a

thin white Skin, an hard cylindrical Stone, having a Chink, or Furrow, running its whole Length. *Prosper Alpinus* informs us, that in the Fruit, there are three things principally used in Medicine; that is the *Spatha*, the Powder contain'd in the *Spatha*, and the Dates themselves: The *Spatha* is used both in Powder and Decoctions. The Powder, taken internally, is highly beneficial in stopping Diarrhæas, Lienteries, and Dysenteries, as, also, all other Discharges of Blood, or other Humours, especially the hepatic Flux, the Hæmorrhoids, the Menses, and a spitting of Blood. This Powder is, also, used by the *Egyptians* in stopping spreading Ulcers, removing a Relaxation of the Uvula, and fixing the Teeth, when loose. They, also, use the Decoction for all the same Purposes; but often mix the Powder with it. It, also, surprisingly strengthens such Joints that are weak, and subject to Defluxions. The white Powder found in its proper Covering in the Spring, when the Palm-Tree begins to flourish, when mixed with Sugar, is by the *Egyptians* very frequently used against Hoarseness, Coughs and Inflammations of the Eyes. This Powder, is, also, sweet, and somewhat astringent; for which Reason 'tis frequently used by the Women, for stopping immoderate Discharges of the Menses, and procuring a Retention of the Fœtus. Unripe Dates, both used in Aliments and Decoctions, are by them, also, used against spitting of Blood, and for stopping all Evacuations of Blood, Lienteries, Diarrhæas, Dysenteries, Vomitings of Blood, and the Hæmorrhoids, as, also, for curing simple Ulcers and Wounds. For the Cure of these Disorders, they, frequently use a Syrup prepared of unripe Dates. They, also, use the Dates when perfectly ripe; at which time they are highly sweet, and somewhat

what astringent; for which Reason they are frequently used in Hoarseness, Coughs, Dyspnæas, Pleurifies, and Peripneumonies. A Decoction of them is, also, frequently used for promoting the Eruption of the Small Pox.

Palma Oleosa, Offic. *Palma Guineæ*, J. B. *Arbor exotica fructu Dactylis similis*, C. B. P. The Palm-Oil-Tree. This Tree grows spontaneously in Guiney. The only Part of it used is its Oil, or rather a thick Ointment of an Orange Colour, and fragrant Smell, obtain'd from the Fruit in the following Manner: To the Pulp taken out of the Kernels, they add a large Quantity of boiling Water. Then they for a long Time agitate the Pulp in a Kettle over the Fire, till it is intimately mixed. Then taking the Kettle off the Fire, they let the Matter stand, till its more sordid Parts subside to the Bottom. Then they skim off the Oil floating on the Surface of the Water; and when they have taken all the Portion then floating on it off, they repeat the same Operation by pouring boiled Water on it again. This Oil is best when recent, not rancid, of an Orange-colour, a fragrant Smell, and of the Consistence of Butter. Externally used, it is anodyne, strengthens the Nerves, allays arthritic Pains, removes Weariness, and relaxes contracted Parts.

Palma Indica, *coccigera*, *angulosa*, C. B. P. *Coccus*, Offic. *Palma nucifera arbor*, J. B. *Nux Indica arbor*, Ger. Emac. The Coco, or Cocoa-Nut Tree. It is produced in both Indies. From this Tree is extracted a Liquor, by the Indians called *Suri*, which, when drank, intoxicates like Wine. It is of a grateful Taste, resembling that of a Mixture of sweet, saline, and acid Substances: When 'tis newly extracted, 'tis pretty sweet, but, in Process of Time, becomes

more acid, and is of a whitish, somewhat green, or pale Colour. From this Liquor is distilled a Water, or Spirit, which burns in the Fire. There is, also, a Vinegar, and a Species of Sugar, by the Inhabitants called *Jagra*, prepared from it. The Method of extracting this Liquor is accurately describ'd by the Authors of the *Hortus Malabaricus*. They make an Incision in the Top of the Capsule, which bears the Flowers or Fruit, and which they call the Breast of the Tree, and hang a Vessel to it. About four Inches below the Top of the Capsule, they make an oblique Incision in the Bark, which they raise by way of *Beard*, as they call it, over which the *Suri* may drop into the Vessel. In the Morning and Evening, and sometimes, also, in the Middle of the Day, they remove the Vessels with the *Suri*. That obtained in the Morning is sweet, that in the Evening somewhat acid, and that obtained next Day acescent; but that on the third Day, entirely acid, without any Sweetness at all. In order to make Vinegar of the *Suri*, they put the Vessels, in which it is received, among Lime for fifteen Days, by which a violent Fermentation being excited, much Froth thrown up, and a whitish Matter subsiding to the Bottom, the *Suri* is changed into Vinegar. The Species of Sugar called *Jagra* is prepared thus: They put into the Pots a sufficient Quantity of Lime, to tinge the *Suri* distilled into them of a reddish Colour; then they boil this Liquor, continually stirring it with a Spoon, till it is inspissated. Then a red Sugar is produced, which they render white by reiterated Dissolutions and Boilings. The exterior Covering of the Nut is at first said to be eatable, of a pretty sweet Taste, good for corroborating the Stomach, stopping Diarrhæas and curing Surfeits. The

Liquor,

Liquor, or Wine of Suri, is said to be highly beneficial to pthitical Patients, and those who labour under any Disorders of the Kidneys, or a Difficulty of discharging their Urine. From the bruised Kernels is expressed a Milk without the Assistance of Fire, eight Ounces of which drank every Morning, with the Addition of a little Salt, are highly efficacious in killing Worms, especially in Children. The Liquor contained in the Kernel is proper for extinguishing Thirst and Fevers, for curing and cleansing the Eyes, and for washing the Skins of Women. It, also, purifies the Blood; cleanses the Stomach, and Urinary Passages, and removes Disorders of the Breast. It is of a grateful Taste, affords much Nourishment, and is an excellent Drink in Biliary Fevers.

Another Species of *Palma*, is the *Coccus de Maldiva*.

Palma Haira, The Ebony Tree. See *Ebenus Ethiopica*.

Palma Arecifera. The *Areca* or *Fausel*. See *Areca*.

Palma Christi, Tourn. Mat. Med. *Ricinoides arbor Americana folio multifido*, Tourn. Inst. *Avellana purgatrix*, C. B. P. Purging Nuts. The Tree is a Native of *America*, and the Nuts are used, which are of a whitish Colour, and one of which both vomits and purges for several Days; but if divested of its Pellicle, and divided into smaller Doses, it proves a gentle Purgative.

Palma minor, C. B. P. *Chamærrhiphes*, Offic. *Palma humilis Hispanica spinosa*, & *non spinosa*, J. B. *Palmites sive Chamærrhiphes*, Ger. Emac. The Dwarf Palm. It grows in *Spain* and *Italy*. The Berries are used, which are of an astringent Quality, and for that Reason exhibited against all Fluxes.

Another Species of *Palma*, is the *Draco Arbor*, or Dragon Tree.

Panax Asclepium, The All-heal of *Esculapius*. A Species of *Ferula*.

Panax Chironium, Dwarf Sun Flower. The same as *Helianthemum*.

Panax Coloni. Clowns all Heal. A Species of *Galeopsis*.

Panax Heracleum, Offic. *Panax Heracleum majus*, Ger. Emac. *Panax costinum*, C. B. P. *Pastinaca Olusatris folio*, Boerh. Ind. Alt. Hercules's All-heal. It grows in the Gardens of the Curious, flowering in June. From the Stalk of this wounded, especially near the Root, during the Summer Months, a Juice flows which concretes spontaneously, and is called in the Shops *Opoponax*, which, if good, is externally of a yellow Colour, but internally white, or somewhat inclining to yellow, of a bitter Taste, a strong Smell, and pinguious Consistence; it easily dissolves in Water, is light, friable, and when dissolv'd turns the Water milky. It mollifies, digests, discusses Flatulencies, and purges thick and viscid Phlegm, from the remote Parts, as the Brain, Nerves, Joints, and Thorax. The Roots of this Plant are said, by those who import it, to be effectual in all cold Affections of the Brain and Nerves, for Disorders of the Breast, and tormenting Pains of the Stomach; for all Obstructions of the Viscera, and Diseases of the Kidneys, Bladder, and Womb; on which account, they are of Service in inveterate Pains of the Head, Vertigo, Epilepsy, Stupor, Lethargy, Convulsions, Palsies, Asthma, Cough, Jaundice, and Dropsy.

Panicum, Offic. *Panicum album vulgare*, Park. Theat. Panick. It is sown in the Fields of *Germany*. The Seed is used, which is drying and refrigerating, and binds the Belly. It is principally used in Spittings of Blood, and in nocturnal Pollutions.

Papaver album, Offic. *Papaver bortenſe ſemine albo*, ſativum Dioſcoridi, album Plinio, C. B. P. *Papaver ſativum*, J. B. White Poppy. It is ſown in Gardens, flowering in July; the Leaves, Flowers, Heads and Seeds, together with the condenſed Juice, called *Opium*, are uſed. The Herb, Heads and Seeds refrigerate and moiſten, and are principally uſed to promote Sleep, in Affections of the Breſt, and Lungs, particularly in a Cough, Hoarſeneſs, and Conſumption, but in the laſt I am afraid with very bad Effect. They are alſo uſed in Fluxes of the Belly, and are excellent Ingredients in Fomentation, intended to mitigate Pain and induce Sleep. For the moſt ſevere Pain of an Ophthalmy, *Sen-nertus* preſcribes, as an effectual Remedy, an Emulſion of the Seeds of Poppy, with Milk, Water of Lettuce, and Decoction of Fenugreek.

Papaver nigrum, Offic. *Papaver bortenſe nigro ſemine*, ſylveſtre Dioſcoridi, nigrum Plinio, C. B. P. Black Poppy. It is ſown in Gardens, flowering in June. The Leaves, Flowers, Tops, and Seeds are uſed, which agree in Virtues with the former.

Papaver rubrum, *Rheas* & *erraticum*, Offic. *Papaver erraticum majus* *ῥοδὸς* Dioſcoridi, *Theophraſto*, & Plinio, C. B. P. Red Poppy, or Corn Roſe. It grows among Corn, flowering in June. The Flowers are uſed, which are greatly refrigerating, induce Sleep, and mitigate Pains. It is principally uſed in Fevers, and Pleuriſies, for which it is reckon'd a Specific, and for a Quinſey. Theſe Flowers are glutinous, and give much ſuch a faint red Colour to the blue Paper as the Solution of Opium, by which it ſeems, the Salt of the one is analogous to that of the other; but, in Opium, this Salt (which ſeems pretty near to Sal Ammoniac) is mixed with a great deal of fetid

Oil, whereas, in the red Poppy, the Proportion of the Oil is much leſs than that of the viſcous Phlegm. Thus the Flowers of this Plant are emollient, and good for Expectorations in Deſluxions of the Breſt, in Rheums, and in a dry Cough. They ſtanch Blood, and are gently ſudorific.

Another Species of *Papaver* is the *Argemone*, Offic. *Papaver erraticum capite longiſſimo*, *glabro*, Tourn. Inſt. Long-headed Poppy. It grows by the Sides of Ditches, flowering in June, and the Leaves and Juice are uſed in Medicine. A Cataplaſm of the Leaves, as Dioſcorides ſays, abſterges the *Albugo*, and Films, in the Eye, and mitigates Inflammations.

Papaver corniculatum, this is already ſpecify'd under *Glaucium*.

Papyrus, Offic. *Papyrus Nilotica*, J. B. *Papyrus Antiquorum* Nilotica, Park. The Paper Reed. It grows in Egypt and Syria, and is the Plant of which the Antients made Paper. The Egyptian Surgeons, as we are informed by *Proſper Alpinus*, now uſe the medullary Subſtance of the Leaves, to dilate the Mouths of Ulcers. The Trunk, burnt to Aſhes, cures recent Ulcers, and prevents the Increase of Malignity in others, being ſprinkled thereon; and the diſtilled Water of the recent Trunk is very effectual againſt Cataracts, and Dimneſs of Sight.

Paradiſi Grana, Grains of Paradiſe. See *Cardamomum*.

Paralyſis, Offic. *Primula veris odorata flore luteo ſimplici*, J. B. *Verbaſculum pratense odoratum*, C. B. P. Cowſlips or Paigles. It grows in Meadows, flowering in April. The Herbs and Flowers are uſed. It is drying and heating, and has ſomething of an acrimonious and bitteriſh Taſte; it is, alſo, ſomewhat aſtringent, and has an anodyne Virtue. The principal Uſes, to which it

it is applied, are in Cephalic Disorders, the Gout, and other Pains, and Affections of the Joints.

Another Species of *Cowslip* is the *Herba Petri*, Offic. *Paralysis altera odorato flore pallido*, *Polyanthos*, Park. *Verbasculum pratense aut sylvaticum inodorum*, C. B. P. Great Cowslips, or Oxlips. They grow in Woods and Thickets, flowering in April. The Leaves infused a Night in White Wine, are recommended against the *Anasarca*.

Pareira Brava, Offic. *Caapeba Brasiliensibus*, *Lusitanis Erva de Nossa senhora aut Cipo de Cobras*, Marcg. *Raiz & Erva de Nossa senhora*, Worm. Mus. *Butua sive Pareira brava Lusitanica*, Geoff. Tract. Wild Vine. This Root is commonly about the Bigness of the little Finger, tho' sometimes larger. It is of a brown Colour, wrinkled both ways on the Surface; but its inner Substance is fibrous, like the *Thymelæa*. *Zanoni* says, that when cut transversly it represents the Sun, and its Rays, but this Conceit is without Foundation. It is of a sweetish Taste, with a disagreeable Mixture of Bitter, and without any Smell. Authors pretend that this Root comes from *Brasil*, for this Reason, because we get it from the Portuguese: But it is much more probable, that it is of *East-India* Growth; for a Surgeon sent it from *Surat* to *M. de Jussieu*, by the Name of *Boutua* Root; and wrote, that it grew along the Coast of *Malabar*. This Root is much celebrated by the Portuguese, as an Alexipharmic, and an Antidote against all poisonous Plants. It is undoubtedly a very good Diuretic, and very proper in Nephritic Colics. The Way of using it is: Boil about a Quarter of an Ounce, scraped or rasped, in two or three Pints of Water, till reduced to a Pint; of which the Patient is to drink a Glass every half Hour, in a warm Bath, his Body

being before prepared by Bleeding and Clysters. A Small Quantity of the Syrup of the five opening Roots may be added to the Decoction, and, by this Method alone, *Geoffroy* the elder, cured the great *Abbé Bignon* of a Stone Colic, and made him void a very large Stone. When given in a large Dose, it heats considerably. It seems to act by dissolving the slimy Matter contained in the Kidneys and Bladder; and has been given with great Success, mixed with Balsam of *Capiivi*, in *Gonorrhæas*, after sufficient Evacuations. The Decoction already mention'd, has, also, done Wonders in Hepatic Colics, arising from an Obstruction of the Orifice of the Gall Bladder, a Glass being drank every three Hours, to the Quantity of a Quart. The Portuguese use this Root powder'd for Quinseys, and Diseases of the *Thorax*.

Pareira Brava alba, Geoff. Tract. *Pareira Species secunda*, *Lochn. Sched.* The white wild Vine. It is said to come from *Brasil*. It is more woody than the former, composed of Fibres, of which some are Longitudinal, the rest Orbicular. The Bark of this Root is white, but the Substance within yellow, like Liquorice.

Parietaria, Helxine, Offic. *J. B. Parietaria Officinarum & Dioscoridis*, Boerh. Ind. Alt. Pellitory of the Wall. It grows upon Walls. It absterges, and is somewhat astringent and cooling; it is seldom used internally, yet some commend it in Disorders of the Breast, for the Strangury, the Dropsey and the Stone. Externally used, it is good for Tumors, the *Erysipelas*, Burns, and for Wounds. By the chymical Analysis, it yields a great deal of Oil, fix'd Salt, and Earth, and several Liquors, of which some are acrid, and the rest acid: As for the volatile Salt, there is none obtained from this Plant, that is concrete;

crete; but it yields an urinous Spirit. *Dioscorides* affirms, that it lenifies and resolves, and is good to stop Tetters, and spreading Ulcers: They applied it, in his Time, to the Parts affected with the Gout; they gave the Juice to drink in an old Cough, made a Gargarism of it for the Diseases of the Throat; and injected it into the Ears to appease their Pain. *Cæsalpinus* says, it provokes Urine, and opens the Kidneys; *Tragus* very much commends the Decoction to remove Obstructions of the lower Belly. *Camerarius* prescribes it bruised with Vinegar, and applied hot to the *Testes*, in Case of Ruptures.

Parnassia. Grass of Parnassus. This is already specify'd under the Article *Gramen Parnassi*.

Paronychia rutaceo folio, Offic. *Paronychia foliis incisif*, Park. *Sedum Tridactylites tectorum*, C. B. P. Rue Whitlow-Grass. It grows upon Walls, and old Buildings, flowering in May. The Herb is used, which is greatly commended in scrophulous Disorders. A Physician, whom I knew, says *Boyle*, was sent for to a scrophulous Patient, in whose Throat he found a Tumor so large, and so unluckily seated, that greatly compressing the *Oesophagus*, it render'd Deglutition exceedingly difficult, the Tumor was, also, hard and stubborn, so as not to be discuss'd, nor brought to Suppuration; whence the Patient was put in imminent Danger of being starv'd. In this Strait, the Physician remembering the Character I had given of Whitlow-Grass, sent about the Country to get all that could be procured, and first gave a little of it, in the Form of Infusion, in such liquid Aliments as the Patient was able, though with great Difficulty, to get down; and having by this Means, after some Time, gradually made the Deglutition more easy, he gave the Remedy in greater

Plenty, to impregnate the whole Mass of Blood and Juices of the Body with the Virtue of the Herb, whereby the Tumor was at length dissolved, and the Patient cured.

Parthenium, Fever-few is so call'd. See *Matricaria*.

Passulæ. See *Uva*.

Pastinaca, Offic. *Pastinaca latifolia sativa*, C. B. P. Parsnep. It is cultivated in Gardens, flowering in June. The Root is used in the Kitchen, and the Seed in Physic. The Seeds are heating and drying, provoke Urine, and discuss Flatulencies. It is the Opinion of some, that old Parsneps which have remain'd Years in the Ground, induce Deliriousness and Madness; for which Reason they give them the Name of *Madneps*, that is to say, *Mad Parsneps*. I cannot really determine, whether this is the Case or not, but it is very certain, that Parsneps have frequently excited all the Symptoms abovemention'd, which go off after Sleep. *Cæsalpinus* says, that they who pull the Roots in Winter, must beware of the *Cicuta*, or *Cicutaria*; because while he was at *Mompagard*, he saw two Families, who were almost dead with eating the Roots of these Plants, instead of Parsneps; but they recover'd by the Help of Vomiting, Venice Treacle, *Pulvis saxonicus*, and some Purgatives.

Pastinaca sylvestris, *Elaphoboscum*, Offic. *Pastinaca sylvestris latifolia*, C. B. P. Wild Parsnep. It grows by the Borders of Fields, flowering in July. The Root, and Seeds are used. It agrees in Virtues with the former, and differs only from it in its Culture.

Pedicularis, Offic. *Pedicularis pratensis purpurea*, C. B. P. *Pedicularis quibusdam Crista Galli, flore rubro*, J. B. Red Rattle. It grows in Meadows and moist Pastures, flowering in Summer. The Herb is used, which is cooling and drying, and is useful

useful in *Fistula's*, and sinuous Ulcers. It stops Bleeding, and the Menfes.

Pentaphyllum, & Quinquefolium, Offic. *Pentaphyllum sive Quinquefolium vulgare repens*, J. B. Cinquefoil, or five Fingers. It grows by Hedges, flowering in the Summer. The Root, and Herb is used. It is vulnerary, and astringent, good for all Kinds of Fluxes and Hæmorrhages. It is serviceable in spitting of Blood, and in Coughs, and is recommended for the Stone, for Hernia's, and for Fevers.

Pepo, Offic. *Pepo oblongus*, C. B. P. The common Pompon. It is sown in Gardens, and upon Dung-hills, flowering in June. The Fruit is used in the Kitchens, and the Seed in Physic, tho' but seldom. It agrees in Virtues with the Cucumber.

Percepier, Offic. *Percepier anglo-rum quibusdam*, J. B. Parsley-Piert. It grows among Corn, flowering in the Summer. The Herb is used, which is said to be a speedy, and potent Provoker of Urine, and to break the Stone.

Perfoliata, Offic. *Perfoliata vulgaris*, Ger. Emac. *Perfoliata vulgarissima sive arvensis*, C. B. P. Thorow-Wax. It grows among Corn, flowering in July. The Leaves are used. It is vulnerary, and is principally used in recent Wounds, in an umbilical Hernia, and for strumous Swellings.

Perforata. A Name for the Hy-pericum, or St. John's Wort.

Periclymenum. The Honey-suckle. See *Caprifolium*.

Periploca. The Name of a Plant thus distinguish'd, *Scammonia monspeliata*, Offic. *Scammonia monspeliaca, foliis rotundioribus*, C. B. P. *Periploca Monspeliaca, foliis rotundioribus*, Tourn. Inst. Italian, or French Scammony. It grows in the Gardens of Botanists, flow-

ering in August. The concreted Juice, which is used in Medicine, requires to be given in a larger Dose than that of the true Scammony, as being less effectual.

Persea, Offic. C. B. P. *Persea arbor Clusii*, Park. Theat. *Pyri facie Aguacat*, J. B. Spanish Pear. It is a Native of Jamaica. The Leaves and Fruit are used. The Fruit is good for the Stomach, and the Powder of the dry'd Leaves stops Hæmorrhages, being sprinkled on the Part.

Persea Malus, Offic. J. B. *Persea molli carne*, C. B. P. The Peach Tree. It is cultivated in Gardens, flowering in March, and the Fruit is ripe in September. Preserved Peaches are extremely grateful to sick Persons, especially to such as are afflicted with Thirst, and Driness of the Tongue, for they strengthen at the same time they refrigerate; whence they are of excellent Service in all hot Distempers. *Brassavola* used to give his Patient a Peach or two roasted under the Ashes. *Amatus* affirms it to be a most delicious Food, and extremely grateful to sick Persons. The Leaves, on Account of their Bitterness, being boiled in Beer, or Milk, destroy and expel Worms in Children. *Galen* says, that they work the same Effect, being bruised, and applied to the Navel. *Parkinson* affirms, that they purge gently, if taken in a sufficient Quantity; the Flowers operate in the same Manner, and more effectually than Damask Roses; for which Purpose there is prepared of them a Conserve, to be taken chiefly in the Morning fasting. The recent Flowers, says *Matibolus*, not only purge, but provoke Vomiting; and, eaten in Sallads, prove Hydragogues in Dropsies; but not without disordering the Patient: The distilled Water is a Cosmetic. The Gum of this Tree is recommended for Fluxes of the

the Belly, the Stone, *Impetigo*, Tumors of the *Fauces*, Roughness of the Wind Pipe, Spitting of Blood, Disorders of the Lungs, and the Dysentery. *Matthiolus* recommends the Kernels for the Gripes, and to prevent Ebriety, being taken to the Number of six or seven before Hand; and for the *Alopecia*, being bruised, and boiled in Vinegar, to a Pap-like Consistence. The Oil of the bruised Kernels, being rubbed on the Temples, procures Sleep, and eases the *Hemicrania*, or Megrin; drank, or used in Clysters, it cures the Colic; and, taken to the Weight of four Ounces, it gives Relief under the Iliac Passion, and the Stone.

Persicaria acris, J. B. *Persicaria non maculata*, *Hydropiper*, Offic. *Potincoba Lusitanis Pulgera*, Pis. Lake-weed, Arsmart, or Water-Pepper. It grows in watery Places. The Leaves are used, and outwardly apply'd are good for Wounds, and indurated Tumors, and for inveterate Ulcers. It is a very potent Diuretic, and the distilled Water of it is commended for the Stone, and to cleanse fordid Ulcers. It is of a very acrid and burning Taste, and gives a lively Tincture of red to the blue Paper. It is full of acid Sulphur and Earth; its Salt resembles that which results from the Mixture of the Salt of Coral, with the Sal Ammoniac, loaded with a great deal more Acid than ordinary. For this Plant, by the chymical *Analysis*, yields a great deal of Acid, Oil, and Earth, and a little volatile concrete Salt. Arsmart is very detersive and vulnerary; and it is used in Glysters, for the Dysentery and *Tenesmus*.

Persicaria maculata, Offic. *Persicaria mitis*, J. B. Spotted Arsmart. It grows in watery, and moist Places, flowering in July and August. The Leaves are used, which are of an astringent and acerb Taste. They are recommended for Inflammations

and recent Wounds. This Plant gives a pretty deep red Colour to blue Paper, which makes us conjecture, that its Salt resembles Sal Ammoniac, loaded with a great deal of Earth, and joined with a little Sulphur. By the chymical *Analysis*, it yields a volatile concrete Salt. The Decoction of the whole Plant is good for a Looseness, and for the Diseases of the Skin.

Personata. Bur-dock. See *Barbana*.

Pervinca. See *Vinca Pervinca*.

Peruvianus Cortex. The Jesuits-Tree. See *Kina Kina*.

Pes asserinus, Offic. *Atriplex diEza* *Pes Asserinus*, J. B. *Chenopodium Pes Asserinus primum Tabernæmontani*, Tourn. Inst. Goose-Foot. It grows upon Dunghills, flowering in July. The Herb is used, which is esteem'd a good Uterine, and Anti-hysteric; and is said to provoke the Menfes, and to expel the dead *Fætus*, and the Secundines.

Pes Cati. Cat's-Foot. This is already mention'd under the Article *Helichrysum*.

Pes Columbinus, Dove's-Foot. This is the *Geranium Columbinum*.

Pes Leporinus. Hare's-Foot. A Species of *Trifolium*.

Petasites, Offic. *Petasites major & vulgaris*, Tourn. Inst. Butter Bur. It grows in watery Places, flowering in March. The Root is used, which is esteem'd sudorific, alexipharmic, and good in the Plague. It is recommended in hysteric Fits, Coughs and Asthma's. It kills the flat Worms in the Intestines, and excites Urine and the Menfes. Externally apply'd, it is good for *Buboes* and malignant Ulcers.

Petroselinum vulgare, Offic. *Apium hortense*, sive *Petroselinum vulgo*, C. B. P. Parsley. It grows in Gardens, flowering in June. The Root, Herb and Seeds are used. The Root is one of the five opening Roots, and is oblong, thick, white, of a

subacid Taste, and of a fragrant aromatic Smell. Parsley is attenuating, opening, detergent, and diuretic, and is principally used in Obstructions of the Lungs, Liver, Kidneys, and gall Bladder.

Petroselinum Macedonicum, Offic. *Petroselinum Macedonicum quibusdam*, Park. *Apium Macedonicum*, C. B. P. *Macedonian Parsley*. It is cultivated in the Gardens of the Curious, flowering in July. The Seeds are small, hairy, striated, of a very dark Green, of an acrid and aromatic Taste, and of a fragrant Smell. It is principally used as a Diuretic, and Emmenagogue, and sometimes as a Remedy against Diseases caused by Witchcraft.

Another Species of *Petroselinum*, is the *Selinum montanum*, Offic. *Selinum sive Apium peregrinum*, Park. Theat. *Daucus tertius Dioscoridis*, Raii Hist. Stone Parsley. It is cultivated in Botanic Gardens. The Seed is used, which agrees in Virtues with the former.

Petum. A Name for Tobacco. See *Nicotiana*.

Peucedanum, Offic. *Peucedanum Germanicum*, C. B. P. *Peucedanum*, *Pinastrellum*, *Feniculum porcinum*, Merc. Bot. Hogs-Fennel. It grows in marshy Ditches, flowering in July. The Root is used. It is commended by the Antients for discussing inflammatory Diseases; for which Purpose, they prescribe a Decoction of the Root in Water, sweeten'd with Honey, and drank warm. Hence it is very proper for resolving a Pleurisy and Peripneumony, when they may be remov'd by an *Anacatharsis*, or Expectoration. They prescribe it also, for bloody Urine, and the Stone or Gravel in the Kidneys. It provokes Urine, is an excellent Resolver of Phlegm, and cleanses the Kidneys of every thing which adheres to them; for which Purpose the Root is boiled in Wine.

It is commended as of Service in the Beginning of a Cataract, and in a Redundance of Phlegm, and as an excellent Resolver and Discusser of all Obstructions. The Root is very good for the hysteric Passion; and is possessed of a balsamic, detergent, and gently heating Virtue; and is of extraordinary Use for cleansing Wounds and Ulcers.

Phagus. A Species of Oak. See *Quercus*.

Phalangium, Offic. *Phalangium magno flore*, C. B. P. *Liliastrum Alpinum minus*, Tourn. Inst. *Phalangium Allobrogicum*, Park. Spiderwort. It is cultivated with us in Gardens, flowering in June. The Leaves, Flowers, and Seed are used, which being drank in Wine, are commended for the Bites of Scorpions, and that Species of Spider called *Phalangium*.

Phalaris, Offic. *J. B. Phalaris major semine albo*, C. B. P. Canary-Grass. It grows in Spain, and in the Southern Parts of France. The Herb and Seed are used. The Seeds and the Juice of this Herb, drank, are commended by the Antients for Pains of the Bladder.

Phaseolus vulgaris, Tourn. Inst. *Smilax hortensis*, Offic. *Smilax hortenensis sive Phaseolus*, C. B. P. Kidney Beans. It is sown in Gardens, flowering in July. The Pods are used, which are opening, digestive, and provoke Urine and the Menses.

Phaseolus, Offic. *Phaseolus erectus*, J. B. *Smilax siliqua sursum rigente*, vel *Phaseolus Italicus*, C. B. P. Italian Kidney-Beans. It is sown in Gardens, flowering in July. The Pod is used, which, as *Dioscorides* says, if boiled whilst green, and eaten, is good to mollify the Belly, and proper to provoke Vomiting.

Another Species of *Phaseolus*, is the *Coubage*, or stinking Bean.

Phellandrium, Offic. *Phellandrium vel Cicutaria aquatica quorundam*,

dam, J. B. *Cicutaria palustris*, Ger. Emac. Water Hemlock. It grows in Ditches and Ponds, flowering in the Summer. It is sweet scented and aromatic, and of excellent Service, where a gentle Dissipation of Humours is required. It is of use in Surgery, for discussing inflammatory and cold Tumors; and is said to resist a Gangrene, and nothing can be more safely apply'd to scirrhus and cancerous Tumours; it is also commended for Diseases of the Breast, being apply'd in the Form of a Cataplasm. The Leaves are commended by *Blancard* in virulent Inflammations of the *Penis*; internally it is an Emetic.

Phellodrys, Offic. *Phellodrys frve Cerro-Sugaro Matthiolo*, Raii. Hist. It grows in *Dalmatia*, and, as some say, in *Greece*; the Leaves, Bark, and Acorns, which are the Parts used in Medicine, agree in Virtues with those of the *Quercus*, or common Oak.

Phillyrea, Offic. *Phillyrea folio Ligustri*, C. B. P. Mock Privet. It is cultivated in Gardens, and the Leaves are used, which are drying, and astringent, and are greatly recommended for Ulcers of the Mouth.

Phlomis, Offic. *Phlomis fruticosa Salviae folio latiore, & rotundiore*. Tourn. Inst. *Verbascum Salviae foliis*, C. B. P. Yellow Sage. It grows in Gardens, flowering in *June*: It is astringent, and reckon'd among vulnerary Plants.

Phœnix. A Species of *Lolium*, or Ray-Grass.

Phu. A Name for several Sorts of Valerian.

Phyllitis. A Name for the *Lingua Cervina*, or Harts-Tongue.

Phyllon, Offic. *Phyllon testiculatum & spicatum*, C. B. P. *Mercurialis fruticosa incana testiculata & spicata*, Tourn. Inst. Childrens Mercury. It grows in the Gardens of the Curious, flowering in the Summer. The Herb

is us'd, which is much esteem'd for the Disorders of Women in *Barbary*, and a Decoction of it is greatly recommended for the Bite of a Mad Dog.

Phyteuma. A Species of Rocket. See *Reseda*.

Phytolacca, Offic. *Phytolacca Americana major fructu*, Tourn. Inst. *Solanum racemosum Americanum*; Raii. Hist. Perk Phytic. It is a Native of *America*, but is cultivated with us in Gardens; the Leaves are used, which are esteem'd an excellent Anodyne.

Pilosella, *Auricula muris*, Offic. *Pilosella major, repens hirsuta*, C. B. P. Common Mouse Ear. It grows in dry Pastures, flowering in *June*, and *July*. It is astringent, and binding, and is reckon'd a good Sternutatory and Vulnerary. It stops Fluxes of the Belly and Uterus, and cures *Hernias*. Externally used as a Gargarism, it is commended for Ulcers of the Mouth. The Powder of it is good for Hemorrhages of the Nose, and its Juice is recommended for the *Herpes Miliaris*. It is very bitter, and reddens blue Paper a little. By the chymical Analysis, besides several acid Liquors, it yields a good deal of Oil and Earth, a little urinous Spirit, and no concentered volatile Salt; which shews it to contain a Salt approaching to that of Alum, wrapped up in a good deal of Sulphur, and mixt with a little *Sal Ammoniack*. Thus the Mouse-Ear is vulnerary and deterfive. An Infusion of it in Wine or Water, is good for the Jaundice, and to prevent the Dropsy. *Pena* and *Lobel* say, it is admirable for the Stone.

Pimenta. *Jamaica Pepper*, or All-Spice. See *Caryophyllus*.

Pimpinella, & *Sanguisorba*, Offic. *Pimpinella, Sanguisorba minor hirsutalævis*, C. B. P. *Sanguisorba minor*, J. B. Burnet. It grows in hilly Pastures, flowering in *June*. This
E c Plant

Plant is alexipharmic, vulnerary, and pulmonic; and is principally used in Catarrhs, Affections of the Lungs, a Phthisis proceeding from Erosion, in malignant Diseases, Looseness and the Hæmorrhoids: It prevents Abortion, and is a Strengtheners: Outwardly it is of Service in all kinds of Hæmorrhages. This *Pimpinella* has the Appellation of *Sanguifera* to distinguish it from the *Pimpinella Saxifraga*, which is of a very hot Nature; but the Plant we are now treating on, is gently astringent, aromatic, and of excellent Service in a Relaxation of the Fibres, and a too thin, and fluid State of the Blood. It is prescribed in an immoderate Flux of the *Menses*, to be eaten with Bread and Butter, or drank like Tea; and so used, it renders all manner of Poison of no Effect. This Plant, infused in Wine is commended, where a Laxness of the Part requires Adstriction; and there is scarce, among Vulneraries, a better Plant for repressing a Flux of Blood in an Hæmoptoe. It is of singular Virtue in the Dysentery, both by correcting the Acidity of the Dysenteric, or peccant Matter, and by gently astringing the relaxed Fibres of the Intestines. The Leaves infused in Wine, or common Water, are good for the Stone and Gravel in the Kidneys.

Pimpinella Saxifraga, Offic. *Pimpinella Saxifragam* a jor, *umbellâ candidâ*, C. B. P. *Saxifragia hircina major*, J. B. *Tragofelinum majus*, Tourn. Inst. Burnet Saxifrage. It grows in Woods, flowering in *June*; the Root, Herb, and Seed are used, which are possess'd of the same Qualities as the Parsley, but are more efficacious in removing and asswaging Pains.

Pimpinella Saxifraga minor, Offic. *Pimpinella Saxifraga major altera*, C. B. P. *Tragofelinum alterum, majus*. Tourn. Inst. Smaller Burnet Saxifrage. It grows in dry Pastures,

flowering in *July*. The Herb is used, which agrees in Virtues with the former, to which it may be a *Succedaneum*.

Pinus, Offic. *Pinus sativa*, C. B. P. *Pinus officulis duris, foliis longis*, J. B. The Pine Tree. It grows common in *Italy*. The Bark and Leaves of all the Species of Pine Trees are refrigerating and astringent; whence they are of Service in Dysenteries, and an immoderate Flux of the *Menses*. The Decoction or Infusion of Pine Tree Tops in Beer, or any other proper Liquor, is supposed to be very effectual for the Stone in the Kidneys or Bladder, and for the Scurvy, and other Affections of the Thorax. The *Nuclei*, or Kernels, are moderately hot and moist, and are maturating, lenient, agglutinating, resolvent and fatning. They are principally us'd in a Consumption, Cough, Strangury, and Acrimony of the Urine. The Resin which concretes about the Cones is of the same Use.

Pinus sylvestris, *Pinaster*, Offic. *Pinus sylvestris*, C. B. P. The Mountain Pine. This Tree grows in divers Parts of *Germany*; and agrees in Virtues with the former. From this Tree is got what is called, *Common Turpentine*, which is whitish, thick, and opaque, like Honey, of a strong Smell, and used principally by Farriers. From this is distilled the Oil of Turpentine, the finer and more volatile Part thereof, and what comes first, being called the *Spirit*: What is left at the Bottom of the Still is the common *Rosin*, which, if taken out, before it be drawn too high, and then washed in Water by a peculiar Method, is what we call *white*, or *yellow Rosin*. The black Rosin is the same, more evaporated, and not washed at all. The common Frankincense is reputed to be the native Rosin of this Tree, or the *Resina Pini*, which is of

of a whitish yellow Colour, where-
of some Pieces are soft, and whitish,
and others hard, brittle and more
yellow. There is but little of this
to be got pure at present, being a-
dulterated by common yellow Rosin,
by someway that crafty Dealers have
found out. The black and yellow
Rosin are much of a Nature, being
used in Ointments and Plaisters. It
is said, that the *Pix Burgundica*, or
Burgundy Pitch of the Shops, is made
of this Turpentine, after it has been
boiled sometime, and before it has
arrived to the Hardness of Rosin.
This is done, as is said, in *Saxony*,
where the white Rosin is made by
boiling the Turpentine in large Ves-
sels, without Distillation.

Pinus maritima, Offic. *Pinus ma-
ritima major*, C. B. P. *Pinus sylves-
tris montana*, Get. Emac. Sea Pine.
It grows in *Provence* and *Languedoc*
in *France*; the Bark, Leaves, and
Resin are used, which agree in Vir-
tues with the former.

Piper. Pepper. Botanists distinguish
two Species of Pepper, the black, and
the white; but *Savary* asserts, that there
are not two Species of Pepper, for Mr.
Dillon, a celebrated Physician, and
Author of the History of the Inqui-
sition of *Goa*, assures us, that all the
Difference between the white and
black Pepper is, that the latter has
its Skin, whereas the former wants
the Skin, which is taken off by beat-
ing it before it is entirely dry, or
by suffering it, after it is dry, to
soak for sometime in Water. Pepper
is an aromatic Fruit, of an heating
and drying Quality, produc'd in
Grains commonly, and us'd in Sauces
and Seasonings. This Fruit, so well
known in *Europe*; is produc'd by a
Plant or Shrub, which grows in va-
rious Parts of the *East-Indies*. The
Plant which bears it, is weak and
creeping; a Circumstance which ob-
liges those who cultivate it, to plant
it at the Foot of large Trees, such
as the *Artan*, and *Coco-Nut-Tree*. Its

Leaves in Figure resemble those of
Ivy, but are less green, more yellow,
of a strong Smell, and pungent Taste.
The Pepper comes forth in small
Clusters, like our Currants; and the
Grains of which these Clusters are
compos'd, at first appear green; then
they become red, in Proportion as
they ripen; and at last black, or
such as they come to us, after they are
left expos'd to the Heat of the Sun
for sometime. Tho' Pepper is pro-
duc'd in various Parts of the *Indies*,
yet it grows most copiously between
Rajapour, and the Cape of *Camarin*.
The Pepper of *Malabar*, or that pro-
duc'd between Mount *Eli* and the
Southern Extremity of the Coast, is
somewhat smaller than the other: but
produc'd in such large Quantities, that
Europe is principally supplied with
it. The black Pepper consumed in
Europe, is of three sorts; that of *Ma-
labar*, that of *Jamby*, and that of
Belipatham. But this last is less
esteem'd in *Europe*, on Account of
its Smallness and Dryness; two Cir-
cumstances which recommend it to
the *Indians*, who think small Pepper
less hot than the large Kind. The
white Pepper ought to be chosen
large, well nourish'd, weighty, and
without Mixture of black Grains or
Rubbish; which when reduc'd to a
Powder, is of a beautiful Grey or
a whitish Colour. As for black
Pepper, which ought to be possess'd
of almost all the Qualities of the
white already enumerated, we must,
also, take care that the Grains be not
wrinkled; that there be a large
Quantity of white Grains among
them; and that the largest Grains
have not been separated, in Order
to be whiten'd, a Practice very com-
mon in *Holland*, *Rouen*, and *Paris*.
As a great Part of the Pepper,
whether white or black, is sold
beaten, it is easy for Persons of a
fraudulent Disposition to sophisticate
it, which Retailers generally do by
mixing, with the black Pepper, *Ma-*

nigrette, a Species of *African* Pepper; the Dust of Pepper; and the Crust of Bread. With the white Pepper they mix white Spices, or black Pepper whiten'd; so that it is very difficult to distinguish the sophisticated from the genuine Kind; for which Reason we ought to buy from Persons of Honesty and Skill. Druggists and Spice Merchants sell various other Kinds of Pepper, describ'd by Travellers in their Relations; such as the Pepper of *Madagascar*, that of *Mascarine*, or the Island of *Bourbon*; the Pepper of *China*, the long Pepper of the *Indies*, *Ethiopia*, and *America*; *Guinea* Pepper, *Jamaica* Pepper, the Pepper of *Thevet*, and that of *Africa*. The Pepper of *Madagascar* is white, and grows on a Plant, which creeps on the Ground, and whose Stalks and Leaves have the same Smell with the Fruit, which ripens in the Months of *August*, *September*, and *October*. The Pepper of *Mascarine*, which is, also, produc'd in the Island of *Java*, is call'd *Cubebs*, or Pepper with a Tail. It exactly resembles the black Pepper, except that it is larger, and has a Tail. The Plant which produces it creeps on the Ground; and its Fruit, which ought to be chosen large, well nourish'd, and without Wrinkles, adheres to it in the Form of Clusters. The *China* Pepper describ'd by *Father Le Compte*, is a Fruit as large as a Pea, and of a greyish Colour, mix'd with red Streaks. When it is ripe, it opens spontaneously, and contains a small Nut, as black as Jet; after it is gather'd, it is expos'd to the Sun, in order to be dried. The Nut, which is of a very strong Taste, is thrown away, and the Husk or Bark only kept. The Smell of the Pepper Tree is so strong, that the Fruit must be gather'd at different times, lest those employ'd in that Work should be injur'd by it. The long Pepper which is a kind

of Congeries of many small Grains, strongly united to each other, grows upon a Shrub, whose Leaves are slender, green, and placed upon a short Stalk. This Pepper is of three kinds, that of the *East-Indies*, that of *America*, and that of *Ethiopia*, which is called Grains of *Zelim*. But that of the *Indies*, is the only true Long Pepper, since the others bear but little Resemblance to it. Good long Pepper ought to be recent, well nourish'd, large, weighty, difficult to be broken, not rotten, without Rubbish or a Mixture of Earth. It is us'd in Medicine in various *Galenic* Compositions, and is an Ingredient in the *Theriaca*. It is, also, sometimes mixed with Spices. The *Guinea* Pepper is of a red Colour, resembling that of Coral. It is cultivated in *Languedoc*, and especially in the Villages about *Nimes*. It is commonly found in the Shops of the Druggists and Grocers. The Vinegar-makers use it for making their Vinegar. Some, also, preserve it with Sugar; it ought to be chosen recent, in Pods, which, are beautiful; dry, sound, and very red. There are four Sorts of this Pepper: The first is called *Chilcbotes*; the second, which is very small, is called *Chilzerpin*; and these two kinds are of an acrid and highly pungent Taste. The third is call'd *Tenacchiles*, which is moderately hot, and which the *Indians* eat, like other Fruit, with Bread. The fourth is call'd *Chilpelagua*. This last is neither so pungent as the two first, nor so mild as the third; this is the Species so much esteem'd by the *Spaniards*, and generally us'd by them in preparing their Chocolate. There is, also, another Species of this Pepper, which only grows about *Peru*, where it is call'd *Agy*. A large Quantity of this Species is cultivated in a small Plain, about six Leagues in Circumference, near the Village of *Arica*, on the Coast of *Peru*, and in the Val-
lies

lies of *Sama*, *Tacna*, and *Cocumba*. Tho' these four Places are of a small Extent, and there is a great Demand for this Kind of Pepper, yet they furnish every Year, as much as draws more than six hundred thousand *Piafters*; which would appear incredible, if the Excrements of the Bird call'd *Guana*, with which the *Peruvians* dung their Land, did not render it so fertile, that the Grains sown in it, and especially the *Agy*, yield four or five hundred for one. For an Account of the *Jamaica* Pepper, see *Caryophyllus*. The Pepper of *Thevet*, which the *Dutch* call *Amomi*, on account of its Resemblance to the *Amomi*, or *Jamaica* Pepper, is a small round Fruit, as large as the white Pepper, a little roundish, and with a Species of small Crown at one of its Ends. It is, also, called the small round Clove, because its Taste resembles that of the true Clove.

Piper Indicum. Guinea Pepper. The same as *Capsicum*.

Piper longum, Offic. J. B. *Piper longum Orientale*, C. B. P. *Tlatlancuaye* five *Piperis longi* Species II Hern. *Catta-tripali*, Hort. Mal. *Acapatli*, Laet. Long Pepper. It grows in *Java* and *Malabar*, and the immature Fruit is used, which is of a bitterish Taste, and is by some accounted alexipharmic; good for the Stomach, to expel Wind, and promote Digestion. See *Piper*.

Piperitis. The same as *Lepidium*, or *Dittander*.

Pistacia. The Pistachio, or Fistic Nut. See *Nux Pistacia*.

Pistolochia, Offic. *Pistolochia vulgarior*, Park. Theat. *Aristolochia*, *Pistolochia*, C. B. P. Bushy rooted Birthworth. It grows spontaneously in *Italy*, *France*, and *Spain*, flowering in the Summer. The Root is used, which agrees in Virtues with the *Aristolochia*.

Pisum, Offic. *Pisum, vulgare parvum album, arvense*, J. B. Common white Peas. They grow in Fields and Gardens; and the Seed is used, but oftner in the Kitchen, than in the Shops. Broth made with Peas, not only renders the Body soluble, but, also, procures a more free and copious Evacuation of the *Lochia*. It is also beneficial in nephritic Pains, according to *Simon Pauli*. Some also, with Success, use a Decoction of Peas, in order to cure cutaneous Disorders and Pimples.

Pityusa. Pine Spurge. See *Tithymalus*.

Pix. Pitch. This is a Species of Gum obtained from the Pine Tree, by making Incisions in it. It receives different Names according to its different Preparations, Colours, and Qualities. When it flows from the Tree, it is called *Barras*, but is afterwards distinguished into two Sorts, which have different Names: That which is most beautiful and clear, is called *Galipot*; and that which is more full of Fæces, and of a worse Colour, is called *Marbled Barras*. The former of these, or the *Galipot*, serves to make all the different Species of Pitch describ'd in this Article. The pinguious Pitch, which is, also, called *white Burgundy Pitch*, is *Galipot* melted with Oil of Turpentine. Some however assert, that the *Burgundy Pitch* flows naturally from Resinous Trees, in the Mountains of *Franche Comté*. Resin is, according to some Authors, a Gum discharged from the Turpentine Tree, the Larch Tree, the Maltich Tree, or the Cypress: But the Opinion of others is far more probable, who from Experience, assert, that it is *Galipot*, boiled to a certain Consistence, and reduced to a Mass of any determinate Weight. The best Resin comes from *Bayonne* and *Bordeaux*. It ought to be chosen dry.

white, free from Water and Sand. Black Pitch, which is properly that known by the Name of *Pitch*, is only *Galipot*, prepar'd in a particular Manner, by putting into it, when it is quite warm, a certain Quantity of Tar, in order to render it black. There are two kinds of it, one hard, another soft, which only differ in this Circumstance. Mr. *Wheeler*, in his Voyages, has given another Method of preparing black Pitch, used in the *Levant*, and which is not much different from that given by *Furetiere* in his Dictionary. He orders us to prepare a Heap of Earth, in which we are to make an Hollow two Ells in Diameter at the Top, but which becomes gradually narrower, as it approaches to the Bottom. This Hollow is to be fill'd with small Portions of such Branches of the Pine Tree, as contains much Gum, laid above each other, till the Hollow is full. Then the upper Part is to be covered with Fire, which burns to the Bottom : By which means the Pitch is discharged from a small Hole made at the Bottom for that Purpose. The best black Pitch comes from *Norway* and *Sweden*, to which that made in *France*, is by no means comparable. The Goodness of hard black Pitch consists in being of a shining black Colour, brittle, dry, and forming, as it were, Rays, when it is broken. What is called the *Pix Navalis* in Medicine, ought to be the Pitch scraped off from Ships ; but 'tis certain, that most Apothecaries use the common black Pitch in its stead. From the black Pitch there is obtain'd an Oil, which, on account of its singular Virtues, is called the *Balm of Pitch*.

Pix liquida. Tar. According to *Pliny*, liquid Pitch, or Tar, was obtained by setting Fire to Billets, or old fat Pines or Firs. The first Running was Tar, the latter, or

thicker Running, was Pitch. *Theophrastus* is more particular : He tells us, the *Macedonians* made huge Heaps of the cloven Trunks of those Trees, wherein the Billets were placed erect besides each other : That such Heaps or Piles of Wood were sometimes a hundred and eighty Cubits round, and sixty, or even an hundred, high ; and that, having covered them with Sods of Earth, to prevent the Flame from bursting forth, (in which Case the Tar was lost) they set on Fire those huge Heaps of Pine or Fir, letting the Tar and Pitch run out in a Channel. From the manner of procuring Tar, it plainly appears to be a natural Production ; lodged in the Vessels of the Tree, whence it is only freed and let loose (not made) by Burning. If we may believe *Pliny*, the first Running, or Tar, was called *Cedrium*, and was of such Efficacy to preserve from Putrefaction, that in *Egypt* they embalmed dead Bodies with it. And to this he ascribes their Mummies continuing uncorrupted for so many Ages. Some modern Writers inform us, that Tar flows from the Trunks of Pines and Firs, when they are very old ; that Pitch is Tar inspissated, and both are the Oil of the Tree grown thick and black with Age, and the Influence of the Sun. The Trees, like old Men, being unable to perspire, and their secretory Ducts obstructed, they are, as it were, choaked and stuffed with their own Juice. The Method used by our Colonies in *America*, for making Pitch and Tar, is, in Effect the same with that of the ancient *Macedonians*, as appears in the Account given in the *Philosophical Transactions*. And the Relation of *Leo Africanus*, who describes as an Eye-Witness, the making of Tar on Mount *Atlas*, agrees, in Substance, with the Methods us'd by the *Macedonians* of old, and the People of *New England* at this Day. Tar was by the Antients

tients esteemed good against Poisons, Ulcers, and the Bites of venomous Creatures; also for pthifical, scrophulous, paralytic, and asthmatic Persons, and is in Reality a very good Pectoral and Balsamic. Water boiled upon Tar, so strongly recommended by the Bishop of Cloyne, is at present in very great Vogue, and is said to have been of great Service, as a Pectoral, Balsamic, Stomachic, Alterative, and Restorative; and it should seem, that the Encomiums bestow'd on this Medicine, are not absolutely without Foundation; for the Virtues of Balsamics are very extensive in the Practice of Physick, for Reasons given in the preceding Dissertation.

Plantago vulgaris Scptinervia, Offic. *Plantago latifolia sinuata*, C. B. P. Great Plantain. It grows by Waysides. The Root, Leaves, and Seed are used, which are heating, and drying, hepatic and vulnerary, and are principally used in all Sorts of Fluxes. The Leaves are bitter, astringent, and give a faint red Colour to the blue Paper; the Roots give it a deeper, and are only astringent; which shews, that in the Leaves the *Sal-Ammoniac*, and the terrestrial Parts of this Plant, are clogged with a great deal of Sulphur. This Plant externally used, is good for Inflammations, being apply'd to the Parts affected. It is a Plant of excellent Use in a Diarrhæa, Hæmorrhages, and Diseases of the Eyes. The bruised Leaves are good to cleanse, and consolidate old Wounds and Ulcers; their Juice is very proper in intermitting Fevers, and in a Phthisis, the distilled Water, mixed with Rose Water, is a good Remedy for Inflammations of the Eyes; the Water injected is of Service in a *Gonorrhæa*, and a Decoction of the Leaves is good for Diseases of the Fances.

Plantago incana, Offic. *Plantago latifolia incana*, C. B. P. Hoary Plantain. It grows in gravelly Places, flowering in June. The Leaves are used, which agree in Virtues with the former.

Plantago angustifolia, Quinquenervia, Offic. *Plantago angustifolia major*, C. B. P. Rib-Wort. It grows in Pastures, and the Herb is used, which agrees in Virtues with the *Plantago vulgaris*. A Dram of the Powder of its Leaves given in Conserve of red Roses, is commended by Boyle, for the Cure of Tertians.

Plantago angustifolia albida, ELEM. Bot. *Holostium*, Offic. *Plantago angustifolia albida Hispanica*, Tourn. Inst. Spanish Plantain. It grows in sandy Places, flowering in April and May. The Herb is used, which is vulnerary, and is principally used in *Hernias*.

Plantago aquatica, Offic. J. B. *Plantago aquatica latifolia*, C. B. P. *Alisma*, Dill. Cat. Giff. *Ranunculus palustris Plantaginis folio ampliore*, Tourn. Inst. Water Plantain. It grows in watery Places, flowering in June. It is of a penetrating and acrimonious Taste. *Schwenckfeld* says, that it cures the falling down of the *Anus*, and mitigates the Redness and Inflammation of the Gout, and the Pain of the Head, proceeding from a cold Cause; and is a Remedy for Spitting of Blood, and voiding it by Urine. The Leaves bruised, and applied to the Breasts, are a sovereign and approved Secret, as *Timach* assures us, for suddenly consuming, and drying up the Milk therein.

Platanus, Offic. C. B. P. *Platanus Orientalis vera*, Tourn. Inst. The Plane Tree. This Tree, so much celebrated by *Herodotus*, and other Writers is, also, called *Platanus latus*, because it extends its

Branches to such a Compass, as to be able to cover more than a thousand Men under its pleasing Shade. Under this Tree, it is reported *Hippocrates* found *Democritus*, and saluted him. It grows in *Crete*. The Leaves, Bark, and its round Knob, or Fruit, are used. Its tender Leaves, boiled in Wine, and apply'd as a cataplas'm, stop Defluxions upon the Eyes, and give Relief under Tumours and Inflammations. The Bark, boild in Vinegar, makes a Collusion for the Tooth-ach. The green Balls or Fruit, drank in Wine, cure the Bites of Serpents.

Plumbago. Leadwort. This is already specify'd under the Article *Dentillaria*.

Pneumonanthe, a Name for the *Gentiana angustifolia*, or Marsh Gentian.

Polemonium, Offic. *Polemonium vulgare cæruleum*, Tourn. Inst. *Valeriana Græca*, Ger. Emac. *Valeriana cærulea*, C. B. P. Greek Valerian, or Jacob's Ladder. This Plant grows in Woods, flowering in Summer. The Herb itself, and its Roots, are used. The Root, drank in Wine, is good against the Bites of venomous Animals, and Dysenteries. When drank in Water, it is beneficial in Dysuries, and Ischiadic Pains. A Dram of it exhibited in Vinegar, proves serviceable to Patients labouring under Disorders of the Spleen. When chew'd, it mitigates Tooth-achs. The Herb is vulnerary.

Polium montanum, Offic. *Polium montanum album*, C. B. P. White Poley Mountain. This Plant is produc'd in *Italy* and *France*, flowering in Summer. The Herb is used, which ought to be chosen receipt and odorous. It provokes Urine and the Menfes, assists dropical and isteric Patients, and is beneficial in the Bites of venomous Animals. It is also of an inciding and aperient Quality.

Polium Lavendulæ folio, C. B. P. Poley Mountain with Lavender Leaves.

Polium montanum luteum, C. B. P. Yellow Poley Mountain.

Polium Menseßulanum, J. B. Erect, or Mountain Poley. These three last Species grow in the same Places, flowering about the same Time, and are endued with the same Virtues as the White Poley Mountain.

Polium Creticum, Offic. *Polium angustifolium Creticum*, C. B. P. *Teucrium calice campanulato, Stæchados facie*, Boerh. Ind. Alt. Poley of Candia. It grows very plentifully in the Island of *Crete*, and its Tops are used. It agrees in Virtues with the *Polium montanum*, for which it is often sold in the Shops.

Polygala, Offic. *Polygala vulgaris*, C. B. P. *Polygalon multis*, J. B. Milkwort. It grows frequently in dry Meadows, flowering in July. The Herb is used. Its bitter Taste proves it to be of an hot and drying Quality. Its Leaves, boiled in Wine, purge Bile by Stool.

Polygala vera, Offic. *Polygala major Massiliotica*, C. B. P. *Colutea caule Genistæ fungoso*, J. B. *Astragalus Matthioli*, Ger. Emac. Milk Vetch. It is cultivated in Gardens, flowering in Summer. The Herb is used, which according to *Dioscorides*, increases the Quantity of Milk, if drank in some proper Liquor.

Polygonatum, *Sigillum Solomonis*, Offic. *Polygonatum latifolium vulgare*, C. B. P. Solomon's Seal. It grows in Woods, flowering in May. It is vulnerary and astringent, good to stop Fluxes, and to consolidate fractur'd Bones. The Leaves of Solomon's Seal are insipid, and have something glutinous in them, which gives slight Nauseas. The Roots are sweet, a little acrid, and glutinous; and give a faint red Colour to

to the blue Paper; and the Leaves more faint. This Plant seems to contain a viscus Phlegm, mix'd with a great deal of Oil. For, by the Chymical Analysis, it yields little besides some acid Liquor and Oil; a little Earth, and fix'd, but no volatile Salt. *Schroder* affirms, that fourteen or fifteen Berries of *Solomon's Seal* provoke Vomiting; and they say, that one Dram of its Root has the same Effect. The distill'd Water clears the Face, and beautifies the Complexion. The Decoction of the whole Plant cures the Itch, and the like cutaneous Diseases.

Polygonum, Centinodium, Offic. *Polygonum latifolium, Tourn. Inst.* Common Knot Grass. It grows in gravelly Places; and the Herb is used, which refrigerates and inspissates, and is good for old Ulcers and Noma's. This Plant has an herby, glutinous Taste, and a little Acid; it gives a deep Tincture of Red to the blue Paper; it is likely, that the Salt of Knot Grass resembles Alum, but is mixed with a little *Sal Ammoniack*, and a great deal of Sulphur; for, by the Chymical Analysis it yields a great deal of Acid, Earth, and Oil, a little volatile, concrete, and very lixivial fixed Salt. The Juice, Decoction, or Infusion of it in Wine, is given to drink for the Dysentery, Piles, Spitting of Blood, and all Sorts of Hæmorrhages. The Leaves bruised cure Wounds.

Polygonum cocciferum, Offic. C. B. P. Polonian Knawel. It grows in sandy Places, but is very rare, and has the same Virtues ascrib'd to it as the common Knawel. The *Coccum Tinctorium*, or *Polonicum*, is produc'd from the Roots of this Plant; and is an Insect.

Polypodium Quercinum, Offic. Polypodium vulgare, C. B. P. Polypody of the Oak. It grows upon Walls and old Houses, amongst

Rubbish, and upon the Roots and Trunks of Trees; that which grows upon the Oak is most esteem'd. The Root is the Part used in Medicine, which in the Phrase of the Antients, is said to purge off adust Bile and Phlegm. It is esteem'd useful in Obstructions of the Mesentery, Liver and Spleen, and hypochondriac and scorbutic Disorders thence arising. It purges but slowly, and for that Reason is seldom given alone. It is generally given in Decoction or Infusion.

Another Species of *Polypodium* is, the *Dryopteris*, or Oak Fern.

Another Species of *Polypodium*, is also, the *Lonchitis*, or Rough Spleenwort.

Polytrichum aureum, Golden Maidenhair. This is the same as the *Adiantum aureum*.

Poma Amoris. Love Apples. See *Amoris Pomum*.

Populago. Marsh Marigold. A Name for the *Calendula palustris*.

Populus nigra, Offic. C. B. P. The Black Poplar. It grows in watery Places, and by the Sides of Rivers. The Eyes or young Buds, gather'd in April, are used in Medicine. It is disputed whether they are of a cold or hot Quality; but the most probable Opinion is, that they are moderately hot. The Tincture of the Buds with Spirit of Wine, is excellent for old Loosenesses, and internal Ulcers. The Dose is Half a Dram, or a Dram, taken Morning and Evening in a Spoonful of warm Broth.

Populus alba, Offic. Park. The Abele, or White Poplar. It grows in watery Places; and the Bark is used both inwardly and outwardly in the *Sciatica*, Strangury, and Burns.

Populus tremula, Offic. C. B. P. *Populus Libyca, Ger.* Emac. The Asp, or Aspen Tree. It grows in Woods, and in moist watry Places; and the Leaves are supposed to a-

gree in Virtues with those of the black Poplar Tree.

Porrum, Offic. Park. Leeks. They are cultivated in Gardens, flowering in *June*; and are much more us'd in Cookery than in Physic. The Roots, Leaves, and Seeds, are said to be very heating, drying, attenuant, aperient, inciding, and resolvent; they are recommended against the Bites of Serpents, for Burns, mucilaginous Infarctions of the Lungs; and are said to be diuretic, and to increase the Seminal Juices. This Plant contains a fetid, oily, volatile Salt. Whence its Bulb being bruised, causes a Distillation of Tears from the Eyes and Nostrils; for this Reason, it is proper in Cases where Heat is required, or where an Excess of Heat is not feared; but is injurious to those who abound too much with Blood, or whose Blood is of too loose a Contexture; as when it is voided by the urinary Passage, by an *Hæmoptoe*, or by the Hæmorrhoidal Veins; it provokes the Menfes and Urine; and is very good for the Bites of Serpents and Combuſtions.

Porrum vitigineum, Offic. *Porrum tonsile*, Ger. Vine Leeks. They are said to grow on the Mountains of *Westmoreland*, flowering in *June*. The Leaves are used, which are said to provoke Urine and the Menfes, to be good against the Bites of Serpents, and to be offensive to the Stomach.

Portulaca, Offic. *Portulaca, latifolia sativa*, C. B. P. Purslane. It grows in Gardens, flowering in *July*. The Seeds are one of the four lesser cold Seeds. This Plant affords an excellent Aliment and Medicine; its Parts are very succulent, and the Juice astringent, remarkably aperient, expulsive, and cooling in inflammatory Diseases, and very good to wash the Gums, when affected with a Gangrene. A

Decoction of the Leaves makes an excellent Gargarism for the Quinsey, and is no less serviceable in the Phrensy, Pleurisy, Peripneumony, Scurvy, and Inflammations of the Viscera and Intestines; it tempers Bile, and is corroborative, especially if the Plant be boiled with Whey. The Juice is somewhat acid, nitrous, and very viscid, which renders it qualify'd to correct an excessive Motion, or Volatility of the Spirits, a Putrefaction, and a Rigidity of the Fibres; whence it is of Service in all acute Diseases. Being eaten in Salads in the Summer Season, it mitigates the Bile, and prevents Disorders which may be justly apprehended from an Excess of that Humour; it destroys Worms, and is of Service in malignant putrid Fevers, Heat of Urine, and the Stone in the Kidneys. The Leaves applied to the Head, ease the Pains thereof; the distilled Water is very good for an excessive Flux of the Menfes, and for Hæmorrhages; the Juice is of great Efficacy in a Consumption. The whole Plant is extremely full of Juice; so that if you compress and rub the Leaves between your Fingers, they will almost spend themselves wholly in Juice; so that if you bruise a Pound of the Leaves, and squeeze out all the Juice, there will scarce remain a Dram of solid Substance.

Portulaca sylvestris, Offic. *Portulaca angustifolia sive sylvestris*, C. B. P. Wild Purslane. It grows in Fallow Grounds, and by the Sides of Paths. The Herb is used, and agrees in Virtues with the preceding.

Portulaca maritima, Offic. *Hali-mus sive Portulaca marina*, C. B. P. Common Sea Purslane. It is commonly found in the Salt Marshes, flowering in *July* and *August*. The Leaves and tender Branches, pickled after the Manner of *Samphire*, are used by the *English* as well as the *Dutch*.

in Sauces, for exciting an Appetite. It is a hot Plant, and is by some commended as a Cosmétique.

Potamogeton, Offic. *Fontalis major latifolia vulgaris*, Park. Pond Weed. It is frequently found in stagnant Waters and Fish Ponds, flowering in *June* and *July*. The Herb is used, which is of a refrigerating and inspissating Quality; it is, also, beneficial against Itchings, inveterate Ulcers, and *Nomæ*.

Potentilla. See *Argentina*.

Poterium. See *Tragacantha*.

Primula Veris, Offic. *Verbasculum Sylvæ majus, singulari flore*, C. B. P. Primrose. It grows in Woods and Hedges, flowering in the Spring. The Leaves and Flowers are used, which are esteem'd warm and drying, and are recommended in melancholic and pituitous Disorders.

Prunella, Offic. *Prunella major folio non dissecto*, C. B. P. Self Heal. It grows in Pastures, flowering in *June* and *July*; it absterges and consolidates; its principal Use is in Wounds, especially of the Lungs, and in Coagulations of Blood; it is, also, frequently employ'd outwardly in Wounds, and in the Quinsy, and other Affections of the Mouth and Fauces. This Plant is, also, of an excellent Virtue in all inflammatory Distempers, Hæmorrhages, and Dysenteries, and in spitting, and voiding of Blood by Urine; it gives a pretty deep red Colour to the blue Paper; it is of an herby, styptic, and glutinous Taste, mixed with a very little Bitterness; from which we may conjecture, that the acid Part of the natural Salt of the Earth is in this Plant disengaged from a good deal of the acrid Part; and that being united with Abundance of Earth and Sulphur, it produces there a Salt which resembles Alum. *Baubine* esteems a Lotion of it for Gunshot Wounds. It is used by Way of Injection in deep Wounds, and by

Way of Clyster in the Bloody Flux; they bathe the Gums of scorbutic Persons with it, adding some Grains of Mastich. The distilled Water of the whole Plant, and the Conserve of its Flowers may be used for the same Purpose. *Cæsalpinus* used the Leaves bruised, and applied in Form of a Cataplasm to suppurate Boils, and to heal Wounds. He used the Juice for violent Pains in the Head, by bathing the Temples with it, after having mixed it with Oil of Roses and Vinegar. *J. Baubine* added to it a little Rose Water, and gave it to drink to those who had been bitten by any venomous Creature.

Prunus Brignolensis, Offic. The Prunello. It grows principally in *Provence*, from whence the Fruit is imported to us; which is said to refrigerate and moisten, without increasing the Number of Stools; it is frequently given in Fevers, as a grateful Cooler.

Prunus Damascena, Offic. The Damask Prune. It grows in *Syria*. The Fruit or Plums are used, which are dried, and brought from *Syria* to *Venice*. These are esteem'd much better than the common Prunes, but are seldom to be met with in the Shops, the common Sort supplying their Place; they are refrigerating, moistening, and laxative, destroying the Acrimony of the Humours, moisten the Tongue, and extinguish Thirst.

Prunus Gallica, Offic. The common Prune. This Plant is cultivated in Gardens, flowering in *April*. It is transported dry to us from *Provence* and *Languedoc*; and its Gum is hard and pellucid. It is thought to be possessed of the same Virtues as the former.

Prunus sylvestris, C. B. P. *Prunellus sylvestris*, Offic. The Sloe or Black Thorn. It is very frequent in Hedges, flowering in *April*.

The

The Bark, Flowers, Fruit, and inspissated Juice, commonly called *Acacia Germanica*, are used in Medicine. The Bark, Fruit, and *Acacia*, are drying, astringent, and incrassating, and are us'd in Fluxes of the Belly and Uterus internally, and externally in Gargarisms, and uterine Baths. The Flowers resolve and bring away the Gravel of the Kidneys. See *Acacia*. The Leaves of the Sloe Tree are bitter, a little styptic, glutinous, and give a faint Tincture of Red to the blue Paper; but the Fruit gives it as deep a Red as Alum; they are a little sour, and extremely styptic: Thus it is likely, that the natural Salt of the Earth predominates in the Leaves, where it is mixed with a little fetid Oil; but that its acrid Parts being disengag'd in the Fruit, is united with the Earth, and forms a Salt resembling Alum. *Tragus* found by several Experiments, that the distilled Water of the Sloe Tree, is an excellent Remedy for the Pleurisy, and for Oppressions of the Stomach. *Matthioli* made use of the Decoction of the Fruit and Root for Ulcers of the Mouth and Throat. The Juice of the Fruit asswages Inflammations of the Eyes. The Syrup is prescrib'd by *Wittichius*, made with several Infusions of the Flowers of this Tree, as a good Purgative.

Pseudo-Acacia, Offic. *Pseudo-Acacia vulgaris*, Boerh. Ind. Alt. Bastard Acacia. This Plant is naturally produced in *America*, but is found in the Gardens of the Curious. *Boerhaave* from *Robinus* says, that the Leaves of this Plant when boiled and expressed, purge in the same Manner with *Sena*. Others recommend a Decoction of the Leaves, for its corroborating and refrigerating Quality. It is exhibited in Dysenteries, but excites violent Pains and Flatulencies.

Pseudo-Diétamnus, Offic. *Marrubium Pseudo-Diétamnium dictum*, Raii Hist. Bastard Dittany. It is cultivated in Gardens, flowering in *July*. The Herb is used, which agrees in Virtues with the *Marrubium album*.

Pseudo-Helleborus, niger, Offic. *Helleborus niger tenuifolius Bupbthalmi flore*, C. B. P. Bastard Black Hellebore. It grows in mountainous Places, flowering in *April*. The Root is used, which is bitter and crid; and sometimes sold for the Roots of black Hellebore, by a fatal Error; for it is esteem'd a deleterious Plant. It takes off Warts like the *Ranunculus*.

Pseudo-Ipecacuanna, Offic. *Apocynum erectum folio oblongo, flore umbellato petalis reflexis coccineo*, Raii Hist. Bastard Ipecacuanna. This Root is a Native of *America*, and is imported under the Name of the true *Ipecacuanha*. It is brown, and poisonous; and I once knew an Instance of a Person, who was vomited severely, and purged for a whole Week, after taking a Dose of it.

There is another Species of Plant, not much unlike this in its Effects, which is the *Apocynum Syriacum*, Offic. Dog's Bane. It is sometimes cultivated in Botanic Gardens, flowering in *Autumn*; and the Leaves are used, but only to poison Dogs, Wolves, Foxes, and other Animals.

Psyllium, Offic. *Psyllium vulgare*, Park. Theat. Fleawort. It is cultivated in Botanic Gardens; and the Seeds are used, which are said to evacuate both Species of Bile, and to mitigate the Acrimony of the Humours, by its mucilaginous Quality; for this Reason it is used in Dysenteries, and Corrosions of the Intestines; its Mucilage is good to assuage Inflammations of the Eyes. The Salt of this Plant resembles that

of Coral, but is mixed with a little Sal Ammoniac, a great deal of Sulphur, and terrestrial Parts. By the Chymical Analysis, it yields a great deal of Oil and Earth, no volatile concrete Salt, a little urinous Spirit, and several acid Liquors.

Ptarmica, Offic. Sneezewort, Bard Pellitory. It grows in Meadows, flowering in *July*. The Leaves are used, which are of an hot and acrid Taste, and are therefore us'd in Salads, in order to correct their Coldness. The Powder taken by way of Snuff, provokes Sneezing.

Pulegium, Offic. *Pulegium latifolium*, C. B. P. Penny-Royal. It delights in moist Places flowering in *June*. The Herb is used, and is esteem'd good for exciting the *Menses*, in a *Fluor Albus*, for expelling the *Fætus*, for a *Nausea*, and Gripes, for expelling the Stone, and provoking Urine, for the Jaundice, and for the Dropsy. This Plant which is very bitter, acrid, and of a very penetrating Smell, gives a deep Tincture of red to the blue Paper; so that it is probable, it contains a volatile, aromatic, and oily Salt, loaded with acid; whereas, in the artificial, volatile, oily Salt, this Acid is detained by the Salt of Tartar. Thus this Plant is aperitive, hysseric, and good for the Diseases of the Stomach and Breast, since it evacuates those glutinous Sordes, which fill Part of the *Bronchia*, and Vesicles of the Lungs; especially if it is boiled with Honey and Aloes; for then (as *Dioscorides* observes) it purges and procures Expectoration. The Juice of this Plant, clears the Sight, and removes Lipitude. It is said by some that a Spoonful of the Juice of Penny-Royal is a good Remedy for the Chin-Cough in Children, *Chefneau* prescribes a Glass of its Decoction for Hoarseness.

Pulegium erectum, Offic. Upright Penny-Royal. It grows in marshy

Places; the Herb is used, which is grees in Virtues with the former.

Pulegium cervinum, Offic. *Pulegium angustifolium*, C. B. P. Hart Penny-Royal. It is sometimes, tho' not often, found in Gardens, flowering in *June*. It agrees in Virtues with the preceeding, but is said to be somewhat more efficacious.

Pulmonaria maculosa, Offic. *Symphytum maculosum* sive *Pulmonaria latifolia*, C. B. P. Sage of Jerusalem. It is cultivated in Gardens, flowering in *April*. The Leaves are used, which are esteem'd Cardiac, and good for the Lungs, and are said to consolidate and heal. It is principally used in Ulcers of the Lungs, Consumptions, and Spitting of Blood. Externally it is reckon'd a good Application for Wounds.

Pulmonaria, *foliis Echii*, Tourn. Inf. *Symphytum maculosum* sive *Pulmonaria angustifolia*, *rubente cæruleo flore*, Pluk. Almag. Narrow-leav'd Sage of *Bethlehem*. It is cultivated in Gardens, flowering in *May*. The Leaves are used, which agree in Virtues with the former.

Pulmonaria Gallia, & *Pulmonaria aurea*, Offic. *Hieracium murorum* sive *pilosissima*, C. B. P. French, or Golden Lung-wort. It grows in Woods, upon old Walls, and in shady Places, flowering in *June* and *July*. The Herb is used, which agrees in Virtues with the *Pulmonaria maculosa*.

Pulsatilla, Offic. *Pulsatilla vulgaris*, Ger. Emac. Pasque Flower. It grows in Gardens, flowering in *April*. The Herb is used, which agrees in Virtues with the *Anemone* and is vulnerary; the Root is something acrid, and excites Sneezing. It is also said to be possess'd of an Alexipharmic Quality. This Plant is so acrid, that the mere Vapour of its Leaves, rubb'd between the Fingers, seems to burn the Nose, and penetrate to the very Brain: It might

might be made use of in the Lethargy. The Leaves bruised are apply'd to Ulcers, but especially to the Wounds of Horses. By the Chymical *Analysis* this Plant yields some Marks of Acidity, a great deal of Sulphur and Earth, and a little fix'd, and no volatile concrete Salt.

Punica. The Pomegranate. See *Granata.*

Pyracantha, Offic. *Oxyacantha* *sive Spina acuta Pyri folio,* C. B. P. Ever-green Thorn. It is cultivated in Gardens. The Berries are used, which are astringent, and agree in Virtues with the white Thorn.

Pyrethrum, Offic. *Pyrethrum flore Bellidis,* C. B. P. Pellitory of Spain. It is imported from the Eastern Parts. The Root of Pellitory of Spain, held between the Teeth, helps the Tooth-Ach, by drawing forth the cold watry Rheum: It, also, helps the Palsy of the Tongue, and the Loss of the Voice consequent thereon. The Root is about a Finger Thick, hard, and of a yellowish brown Colour on the outside and whiter within, and of a very hot burning Taste.

Pyrethrum verum, Offic. *Pyrethrum umbelliferum,* C. B. P. True Pellitory of Spain. It is cultivated in the Gardens of Botanists, flowering in the Summer. The Root is about an Inch thick, of a dark-yellowish Colour, externally, and internally black of a very acrid and hot Taste. This Root held in the Mouth is excellent for removing the Tooth-Ach, by carrying off the watry Rheum which causes it, and is used in Lethargic Disorders and a Palsy, to very good Purposes.

Pyrola, Offic. *Pyrola rotundifolia major,* C. B. P. Winter-Green. It grows on mountainous and woody Places, flowering in June. The Herb is used, which is refrigerating, and drying, astringent and consolidating. It is an excellent Vulnerary, both externally and internally used.

Pyrola altera, Offic. *Pyrola folio mucronato serrato,* C. B. P. Smaller Winter-Green. It grows in Woods, flowering in June. The Herb is used, which agrees in Virtues with the former.

Pyrus, Offic. *Pyrus sativa,* C. B. P. The Pear Tree. It is frequently cultivated in Gardens, and Orchards, flowering in April. The Fruit is used which is cooling, and astringent.

Quercus, Offic. *Quercus cum longis pediculis,* C. B. P. *Quercus sive Robur,* Chab. The Oak. It grows in Woods and Hedges, and the Bark of the Tree, the Buds, the Leaves, the Acorns, and their Cups, and the excrementitious Tubercles called Galls, are used, which are all esteem'd refrigerating, drying and astringent, and for this Reason are recommended in Fluxes of the Belly, Uterus, and Weakness of the Genital Organs.

Quercus parva, sive Phagus Græcorum, & *Esculus Plinii,* C. B. P. *Phagus, Esculus,* Offic. Esculent, or Sweet-Oak. It grows in Greece and Dalmatia; and the Bark, Leaves, Acorns, and their Cups or Calyces, are used, and agree in Virtues with the former.

Another Species of Oak, is the *Cerrus, Agilops,* Offic. *Quercus calyce echinato glande majore,* C. B. P. The Holme Oak, or Bitter Oak. It grows in Italy, and the Root, Leaves, Bark, and Galls are used. The Root is good for the Bites of Scorpions. The Leaves, Bark, and Galls stop Fluxes.

Another Sort also of Oak is the *Robur,* Offic. *Quercus gallam exiguae nucis magnitudine ferens,* C. B. P. The Gall Oak. It grows in Pannonia, and Istria. The Galls are used in Medicine. With respect to Galls, there are several sorts: The first and best is termed the *Allepo Nut*; or *Galla Spinosa*; the second, is white; the third, smooth, and round;

round; the fourth, of an irregular Figure; and the fifth has a kind of Crown. All these *Galls* are owing to Insects, which first prick the Oak Trees, and then lay their Eggs in the Wound: These Eggs swell with the Excrecence, and first turn to Worms; then to Flies, which having perforated the *Galls*, make their Escape. And as some Eggs are unfruitful, and remain in the *Gall*, they are observ'd to yield a volatile Salt. *Galls* are very astringent, and are by some given inwardly in Dysenteries: They have also been recommended in Intermitting Fevers; but the Foundation of their Febrifugous Quality, depends on too few Instances to be relied on. *Galls* are the principal Ingredient in making Ink, for if Water is impregnated with Iron, in any manner whatever, and powder'd *Galls* is put into it, the Water turns immediately black, and the black Colour is more or less deep, in Proportion as the Water is more or less impregnated with Iron. It is for this Reason that *Galls* are used in discovering the Contents of Mineral Waters, because if they contain any Chalybeate Principle, they will turn Purple, with powder'd *Galls*, or black if the Steel is pretty prevalent.

Quercus marina. Common Sea Wrack. See *Fucus maritimus*.

Quinquefolium, Cinquefoil, or five Fingers. See *Pentaphyllum*.

Quinquenervia. Rib Wort. A Name for the *Plantago angustifolia*.

Quinquina. The Peruvian Bark. See *Kina Kina*.

Radicula. Radish. A Name for the *Raphanus Hortensis*.

Radix dulcis, Offic. *Glycyrrhiza capite echinato*, C. B. P. Rough-headed Liquorice. It is cultivated in Gardens, flowering in the Summer. The Root is used, which agrees in Virtue with the common

Liquorice. The Powder of the Root is very proper to sprinkle on a *Pterygium*.

Radix Rinzaga, five *Bengalensis*. This came in Use but very lately, for I find no Mention of it in any *Pharmacopæa* or Catalogue of Plants. As to its Virtues, it is recommended by Dr. Tancred Robinson, as a very potent Cephalic.

Radix Simarouba. See *Sima Ruba*.

Ranunculus acris, Offic. *Ranunculus pratensis erectus acris*, Boerh. Ind. Alt. *Ranunculus rectus non repens flore simplici luteo*, J. B. Upright Meadow Crowfoot. It grows in Meadows and Pasture Grounds; and the Herb is used, which is caustic; and which gathered fresh and bruised, and applied to the Skin, excites Pain and Inflammation. The Country People take the Root for the Cure of intermitting Fevers.

Ranunculus, Offic. *Ranunculus pratensis Repens hirsutus*, Boerh. Ind. Alt. *Ranunculus Repens flore luteo simplici*, J. B. Crowfoot. It grows in Meadows, and flowers in May. The Herb which is quite harmless, is often boil'd with other Potherbs in April.

Ranunculus bulbosus, Offic. *Ranunculus pratensis radice verticilli modo Rotunda*, Boerh. Ind. Alt. *Ranunculus tuberosus major*, J. B. Bulbous Crowfoot. It grows in Meadows, and flowers in May. The Plant and Root are both used; the Herb is caustic; the Root, in Consequence of its burning Quality, excites Pustules and Exulcerations, and is of wonderful Efficacy in corroding and drying hard Tumors, and penile Warts, and other Excrecences of the like Nature; but when dried it loses all its Virtues.

Ranunculus palustris, Offic. *Ranunculus palustris rotundifolius*, Raii Hist. *Ranunculus palustris Apii folio laevis*, Boerh. Ind. Alt. Round-leaved Water Crowfoot. It grows in watry

watry and marshy Places, and flowers in June and July. The Herb is used; whose Leaves, Flowers, and small Stalks, applied fresh, raise Ulcers not without Pain; in Consequence of which they remove a *Psora*, and efface Sugillations; applied in the Form of a Cataplasm, in a short Time, they cure *Myrmecia*, *Acrochordones*, and *Alopecia's*; and the Decoction cures Chilblains.

Ranunculus flammeus, Offic. *Ranunculus longifolius palustris major*, Boerh. Ind. Alt. *Ranunculus folio longo maximus Lingua Plinii*, J. B. Great Spear Wort. It grows in watry Places and Ditches, and flowers in June; and possesses all the Virtues of the foregoing Species.

Ranunculus flammeus minor, Ger. Emac. *Flammula*, Offic. *Ranunculus palustris flammeus minor* five *angustifolius*, Park. Theat. Spear Wort. It grows in moist Meadows, and watry Places, and flowers in June. The Herb is used, which possesses the caustic Qualities of the foregoing.

Ranunculus Montanus, Offic. *Ranunculus Montanus maximus albus*, Park. Theat. *Ranunculus montanus Aconiti folio, albus, flore majore*, C. B. Pin. Mountain Crowfoot, with a white Flower. It grows in mountainous and woody Places, and flowers in May and June. The Herb is used, and possesses the same Virtues as the other *Ranunculi*.

Another Species of *Ranunculus*, is the *Thora*, Offic. *Ranunculus folio Cyclaminis, radice Asphodeli major*, Boerh. Ind. Alt. *Thora Montis Baldi* five *Sabaudica*, Ger. Leopard Bane. It grows on the Mountains of Switzerland. Its Roots and small Bulbs bruised fresh, and applied to the Skin, cause Pains, Redness, Inflammations, excite Gangrenes, and render the Humours very acrimonious; hence it is evident that it is of a violent escharotic and caustic Qua-

lity, yet they are of good Service in those Diseases where the nervous System requires a Stimulus; such as fixed Pains of the Bones, Epilepsies, Convulsions, Spasms, hysteric Passions, inveterate Pains of the Periosteum, Gouts, old Ulcers, and ischiadic Disorders; applied to the Skin, they exulcerate and burn it, and the *Panniculus Adiposus*, quite into a Crust; and left in open Wounds produce Fistulas; hence it is called by many *Scelerata Herba*, because with its Root and Bulbs Beggars raise Ulcers on their Children, in order to excite the Compassion of the Spectators. By others it is called *Apium Risu*, which made *Guilandinus* think it was the *Apiasrum* of Pliny which *Dioscorides* calls *Sardonia*. It is also called *Herba Strumea*, because it discusses all stumous and scrophulous Swellings. Taken internally it is poisonous, but externally applied, it cures the Itch in Children.

Rapa, Offic. *Rapa Sativa rotunda*, Boerh. Ind. A. *Rapum sativum rotundum*, J. B. Turneps. They grow in Gardens and Fields, and the Seeds are used, but more used in Kitchens than Apothecaries Shops, they are boiled with almost all Sorts of Flesh; they are moderately nourishing, produce Wind, generate Flesh, but moist, and wanting a due Degree of Rigidity, provoke Urine, increase the seminal Juices, cure the Scurvy, and mitigate the Heat of quartan Fevers. The Juice with Sugar is good for a Cough.

Rapa Sylvestris, Offic. *Rapum Sylvestre non bulbosum*, Park. Theat. *Rapum Sylvestre Matthioli*, J. B. Wild Turnep. It grows in Fields and flowers in Summer. *Dioscorides* says the Root is an Ingredient in *Smegmata*, or detergent Medicines for cleansing the Skin of the Face, and other Parts of the Body.

Raphanus

Raphanus bortenſis, *Radicula*, Offic. *Raphanus ſativus*, Ger. *Raphanus oblongus*, Boerh. Ind. A. The Ra- diſh. It grows in Gardens, and the Root and Seed are uſed, which are opening, abſtergent, and attenuating; the Seed is chiefly uſed for breaking and expelling the Stone, and removing Obſtructions of the Liver and Spleen. They provoke Urine and the Menſes. The *Raphanus* has the ſame Virtues as the *Cochlearia*; the Root is eſculent, expells Phlegm from the Inteſtines, and is carminative. The Flowers, Leaves, Seeds and Roots, are antiſcorbutic, and conſequently good for phlegmatic Conſtitutions; the expreſſed Juice of the Roots and Seeds taken with Honey in a Morning, is a very wholeſome Medicine, drinking after it a Draught of Whey: It cleaſes the Stomach, Kidneys, and Lungs, and is good againſt an inveterate Cough, and Hoarſeneſs, proceeding from Phlegm; but it is quite reverſe in Coughs proceeding from an Inflammation; or for thoſe who ſpit Blood. The Root contains much of aqueous and acrimoniouſ Subſtance; the drier it is the more acrid it becomes, but its Acrimony is loſt in boiling. Its Aquoſity renders it flatulent, on which account it is ſaid not to be good in Hypochondriacal Diſorders: The daily Uſe of the Root, however, is of ſufficient Efficacy to cure a Dropſy in the Beginning; and it is of excellent Service in the Scurvy. The Seeds are opening, but taken inwardly by themſelves, they excite a Nauſea.

Raphanus ſylveſtris, Wild Radish. See *Armoracia*.

Raphanus ruſticanus, Horſe Radish. See *Cochlearia folio cubitali*.

Raphanus aquaticus, Offic. *Sifymbrium aquaticum foliis in profundas lacinias diviſis, ſiliqua breviori*, Tourn. Inſt. Water Radish. It grows in marſhy Ditches, flowering in June and July.

The Herb is uſed, which agrees in Virtues with the Horſe Radish.

Rapiſtrum, Offic. *Rapiſtrum flore luteo*, C. B. P. *Sinapi arvenſis præcox ſemine nigro*, Tourn. Inſt. Charlock. It is frequently found among Corn, flowering in the Summer. The Seed is uſed. It is of a drying, deſterſive, and ſomewhat digeſtive Quality, and provokes Urine.

Rapum. The ſame as *Rapa*.

Rapunculus, *Campanula eſculenta*, Offic. *Rapunculus eſculentus*, C. B. P. *Rapuntium parvum*, Ger. Emac. Rampſon. It grows by the Sides of Ditches, flowering in July. The Root is uſed in the Kitchen and the Seeds in the Shops. The Seed is recommended for Deſluxions of the Eyes, and the Juice for Pains in the Ears. The Root is eſteem'd an agreeable Ingredient in Spring Sallads, and is ſaid to excite an Appetite; it is ſometimes eaten boil'd. If taken with long Pepper, it has the Reputation of increaſing Milk.

Regina Prati, Meadow-Sweet. See *Ulmaria*.

Reſeda, Offic. *Reſeda vulgaris*, C. B. P. Baſe-Rocket. It is found in chalky Soils, flowering in June and July. The Herb is uſed, which mitigates Pains, and diſcuſſes Inflammations.

Reſeda minor vulgaris, Tourn. Inſt. *Phyteuma*, Offic. *Reſeda affinis Phyteuma dicta*, C. B. P. Small Baſe Rocket. It grows about Montpelier, flowering in the Summer; and the Herb is uſed, which is ſaid to increaſe Veneral Inclinations.

Reſina. See *Pix*.

Reſta Bovis, Reſt-Harrow. See *Anonis*.

Rhabarbarum, Offic. C. B. P. *Rhabarbarum lanuginosum ſive Lapathum Chinenſe longifolium*, Munt. Herb. Brit. *Rhabarbarum ſeu Rheum Officinatum*, Geoff. Traſt. True Rhubarb. As much as Rhubarb is uſed, as efficacious as it is found in Medicine, and

as large a Part of Commerce as it maintains, yet are we very little acquainted as to what it is, and the real Place from whence it originally comes. Some will have it come from *Boutan*, the Extremity of all the *Indies*, others from the Provinces of *Xensi* and *Suchen* in *China*, and thence to be carry'd into *Turky*; whilst others will have it grow on the Confines of *Muscovy*, and others again only in *Persia*. This is certain, that *Rhubarb* was unknown to the Antients; and their *Rhapontic*, which came tolerably near it, was not really the same therewith. The true *Rhubarb* first puts out large downy Leaves, then small Carnation-flowers in the Form of Stars, and after this comes the Seed. The Root newly drawn from the Earth is thick, fibrous, and blackish on the Surface, and of a red marble Colour within; when dried, it changes Colour, and becomes yellow without, and of a Nutmeg Colour within. It ought to be chose new, in small compact Pieces pretty solid and ponderous, of an alstringent Taste, somewhat bitter, and of an agreeable aromatic Odour. When good, it will tinge Water almost like Saffron, and when broke, it appears of a lively Colour, inclining a little to Vermilion. Some Druggists have the Art of recovering their decay'd *Rhubarb*, by giving it a yellow Tincture; but the Cheat is easily discovered by handling it: for the Yellow Powder made use of to do it, will thus stick to the Fingers. *Rhapontic* is often mixed with *Rhubarb*, and sent over from the *Lévant*; but this Imposition also may be discovered, because *Rhubarb* is ordinarily in Pieces, almost round, the internal Grain or Lines whereof are transverse; whereas *Rhapontic* is in long Pieces, the internal Lines whereof, which are reddish, growing longitudinally: and besides, *Rhubarb*, upon chewing it, leaves no Clamminess in the Mouth as

Rhapontic does. *Rhubarb* is one of the best and mildest Cathartics in the whole *Materia Medica*, it operates very well on the Bile, and on all the Viscera of the *Abdomen*, and at the same time strengthens the nervous Fibres. On these Accounts, it is proper in weak Stomachs and Intestines. It is given in Substance from twelve Grains to half a Dram, and in Infusion, from half a Dram to a Dram and half; and in a small Dose, it becomes an excellent Alterative. It purges the Bile very effectually, and has a greater Force than any other Purgative, in opening Obstructions of the Liver. It is found by certain Experience, to evacuate the Bile, preferably to any other Fluid. On this account it is the Panacea of Children; and also because it strengthens the Stomach, and carries off all Sorts of Matter that stagnate therein. It is a very good Remedy for Worms, and is given to Children subject to Chronical Diseases, in a Ptisan, called *Rhubarb Water*. The Use of *Rhubarb* is, however, dangerous, when the Kidneys or Bladder are suspected to be inflamed, because it heats considerably; and for this Reason it is improper in *Hæmorrhages*. It is very good in a Looseness, because it purges and strengthens at the same time. In *Cachexies*, it ought to be given in small Quantities for a considerable Time.

Rhabarbarum Monachorum. Monks *Rhubarb*. See *Lapathum*.

Rhamnoides. A Species of Plant thus distinguish'd: *Oleaster Germanicus*, Offic. *Rhamnus secundus Clusii*, Ger. Emac. *Rhamnoides fructifera foliis Salicis, baccis levisiter flavescens*, Boerh. Ind. Alt. Sallow Thorn. It grows in sandy maritime Places, flowering in *June*, the Fruit being ripe in *September*. An acid Rob is prepared of the Berries, which is recommended for the *Dysentery*.

Rhamnus Catharticus, Spina Cervina,
pa,

Rhamnus solutivus *sive Spina insectoria vulgaris*, Park. Theat. *Rhamnus Catharticus*, Boerh. Ind. Buckthorn. It grows in Woods and Hedges, flowering in May, and producing ripe Fruit in September; it purges Bile, Phlegm, and all ferrous Humours, and consequently is of great Efficacy in a Cachexy, Dropsy, and Gout. The only Use of the Berries is to make a cathartic Syrup.

Rhamnus albus, Offic. *Rhamnus spinis oblongis flore candicante*, Boerh. Ind. A. *Rhamnus Certice albo Monsperliensis*, J. B. Ram Thorn with white Flowers. It grows in Spain, Portugal, and other southern Countries, flowering in May, and bears its ripe Fruit in Autumn, a Cataplasim of the Leaves is very efficacious according to Dioscorides in a St. Anthony's Fire, and spreading Ulcers.

Rhamnus niger, Offic. *Rhamnus niger Theophrasti*, Park. Theat. *Rhamnus flore herbaceo bacis nigris*, Jons. Dendr. Black Ram Thorn. It is often found in Gardens, and flowers in May; the Decoction of the Fruit is good for Relaxations, and Weaknesses of the Limbs, as also for Pains of the Gout.

Rhaponticum, Offic. *Rhaponticum folio Lapathi majoris glabro Rha & Rheum Dioscoridis*, C. B. P. *Lapathum præstantissimum Rhubarbarum Officinatum dictum*, Boerh. Ind. A. True Rhapontic. It is frequent in physick Gardens, and flowers in May. It differs but little from the true Rhubarb, only this is somewhat more acrid, less solid, and of a somewhat deeper yellow Colour; with regard to its purgative Qualities, it is somewhat less powerful, but as to its astringent Virtues, it is much stronger. It is both vulnerary and anodyne, it is of singular Efficacy in Diarrhæas, Dysenteries, Convulsions, Ruptures, the Orthopnœa, periodi-

cal Fevers, and the Bites of venomous Animals.

Rhaponticum falsum, Offic. *Rhaponticum folio Helenii incano*, C. B. P. *Centaurium majus*, *Rha capitatum folio Enulæ subtus incano & hirsuto*, J. B. Rapontic. This is cultivated in Botanic Gardens; the Root is thick, oblong, and dense, brown externally, and when cut transversly, of a yellowish Colour internally. It is of a bitterish and somewhat acrid Taste, sub-astringent and of a pretty grateful Smell.

Rhodia Radix, Offic. C. B. P. *A-nacampseros radice Rosæ spirante major*, Tourn. Inst. Rose-wort. It grows on hilly Places, flowering in the Spring. The Part used is the tuberous, and brittle Root, which is of a dark brown Colour on the Outside, and whitish within, and of a rosy Smell and Taste. This Root is heating and drying, and cephalic; its principal Use is in Pains of the Head.

Rhodium Lignum. Rose-wood. See *Aspalatus*.

Rhus Obsoniorum, Sumach, Offic. *Rhus folio Ulmi*, Boerh. Ind. A. Sumach *sive Rhus Obsoniorum & Coriariarum*, Park. Theat. Common Sumach. It is cultivated with us in the Gardens of the Curious, but grows spontaneously in Italy, Spain, and Turkey. The Part used is the Berries, which are refrigerating, drying, and astringent; good in all Kinds of Fluxes, whether of the Belly, Uterus, or Hamorrhoids; externally applied it resists Putrefaction and a Gangrene. It is not improper to observe, that the *Rhus Obsoniorum* of the Cooks, *Rhus Coriariarum* of the Tanners, and the *Rhus rubrum*, or Red-Rhus of Galen, are not different Species of Trees, but one and the same; for the *Rhus Obsoniorum* is the Fruit; the *Rhus Coriariarum*, the Leaves and small Branches; and

the *Rhus rubrum* the Seed of one and the same Tree.

Rhus Virginianum, C. B. P. *Sumach five Rhus*, Ind. Med. *Virginian Sumach*. This is a Native of *Virginia*, but is notwithstanding found with us in the Gardens of the Curious; the Berries is the Part us'd, which does not differ in Qualities from the preceeding Species.

Ribes, *Ribesia*, Offic. *Ribes Vulgaris acidus ruber*, Boerh. Ind. Alt. *Grossularia multiplici acino, five non spinosa hortensis, rubra, five Ribes Officinarum*, C. B. P. Red Currants. They grow in Gardens, and flower in *April*, the Berries only are used which are refrigerating, drying, and subastringent, and are very good for the Stomach; they are chiefly used in Fluxes of the Belly, and Dysenteries; they ease the Colic, and are very good in bilous Fevers; they resist Putrefaction, and allay Thirst; their Sharpness will sometimes occasion Prickings in the Stomach, but that may be easily prevented by the Addition of a little Sugar. Good Sweatmeats are made of Currants, as also a Liquor with Water and Sugar called Currant Wine, used in the Heat of Summer to cool and moisten the Body. A cooling moistening Jelly is also made of them, which is used in Physick and in Food, being very agreeable to the Taste, which, mixed with Water, is given with Success to feverish Patients.

Ribes nigra, Offic. *Ribes nigrum vulgo dictum folio olente*, J. B. *Grossularia non spinosa, fructu nigro*, C. B. P. The Black Currant. It grows by River Sides, and other Places, and flowers in *June*; the Berries only are used, which are esteemed good in a Quinsy.

Ricinus vulgaris, C. B. P. *Cataputia major*, *Ricinus*, Offic. *Grandidilla Peruviana*, Pharmacop. Mexico Seeds. They are cultivated both in some Parts of Germany and France;

the Kernels which are the only Part in Use, powerfully purge Bile and Phlegm, and effectually destroy Worms in the human Body, but as we have much better Purgatives, it is no Wonder that this is seldom exhibited internally.

Ritro, Offic. *Echinopus minor*, J. E. *Carduus sphaerocephalus caeruleus minor*, C. B. P. Little Globe Thistle. This is cultivated in Gardens, and flowers in *July*. The Root is us'd, and agrees in Virtues with the *Echinopus major*, or Glove-Thistle.

Robur. The Gall-Oak. See *Quercus*.

Rorella. See *Ros Solis*.

Rosa Canina, *Cynobatos*, *Cynorhodon*, Offic. *Rosa Sylvestris Canina*, *Cynorrhodon*, *Cynobatos*, Mont. Ind. *Rosa Sylvestris vulgaris, flore odorato incarnato*, Elem. Bot. Common Briar, or Dogs Rose. It grows in Hedges and flowers in *June*. It agrees in Qualities with the Garden Rose, but is a greater Astringent, and consequently more esteemed in the Fluor Albus, and Profusion of the Menfes; the Fruit is esteemed lithontriptic, but the Kernels when taken out more so.

Rosa Damascena pallida, Offic. *Rosa Provincialis five Damascena*, Ger. *Rosa Damascena flore pleno*, Boerh. Ind. Alt. The Damask Rose. It grows in Gardens, and flowers in *June*, the Flowers purge cholerick and ferous Humours, and are generally given to Children, and Persons of weak Constitutions. It is an Ingredient in the *Conserva Rosarum*, *Aqua Rosarum*.

Rosa pallida, Offic. *Rosa maxima multiplex*, C. B. Pin. *Rosa centifolia rubella plena Hollandica dicta spinosa frutice*, Chab. The Damask Province Rose. It is common in Gardens, and flowers in *July*; it has the same Virtues as the common Damask Rose.

Rosa rubra, Offic. *Rosa rubra multiplex*,

multiflex, C. B. P. *Rosa rubra Anglica*, Park. Parad. The red Rose. It grows in Gardens, and flowers in June; the Flower and *Anthera* are used, which are yellow Floscules, which adhere to the Capillaments in the Middle of the Flowers. The Flowers are powerfully astringent; they are chiefly used in Fluxes, Fevers, Thirst, and Loss of Appetite. Externally in Vomitings, Cephalalgias, Watchings, Pains of the Ears, Gums, and Anus, and in Inflammations of the Mouth, Fauces, and Eyes. The *Anthera* dried are used in Dentrifices for astringing the Gums.

Hoffman, in his Treatise *de Præstantiâ remedium domesticorum*, justly observes, that Roses are of singular Service in Medicine, for the Water distilled from them by means of its fragrant Oil is highly beneficial to Nature; whether given inwardly or externally applied, excellently calculated for recruiting Strength, and mitigating Pains and Inflammations in all hot Distempers. The Conserve of Roses in Consequence of its cordial and astringent Virtues is greatly beneficial to phthical and hectic Patients. The Vinegar of Roses mixed with the Spirit and Water of Roses, with the Addition of Nitre and a little Camphire, makes an Epithem which when applied to the Head, he from Experience found to be of uncommon Efficacy in removing obstinate Head Aches, preventing Deliriums, as also stopping immoderate Hemorrhages of the Nose.

Rosa alba, Offic. *Rosa Anglica alba*, Park. Parad. *Rosa alba flore pleno*, Boerh. Ind. Alt. The White Rose. This likewise grows in Gardens and flowers in June. The Flowers are used, which are esteemed opthalmic.

Rosa Moschata, Mont. *Rosa Moschata simpliciflora*, C. B. P. The Musk Rose. It grows in the warmer Climates, but with us it is never

brought into Use, it purges most potently.

Rosmarinus, Offic. *Rosmarinus hortensis angustiore folio*, C. B. P. *Libanotis coronaria*, sive *Rosmarinum vulgare*, Park. Theat. Rosemary. It grows in Gardens, and flowers in Spring. The Leaves, Flowers and Seed are used, which are greatly cephalic, nervine and uterine; they are of great Service in Disorders of the Head, Nerves, and Uterus, Apoplexies, Epilepsies, Palseys, Vertigoes, and a Carus. They sharpen the Sight, cure a fetid Breath, resolve all Obstructions of the Liver, Spleen, and Uterus; they cure the Jaundice, and *Fluor Albus* in Women, and greatly comfort the Heart. Rosemary, with respect to its Virtues, bears a near Affinity to *Spike* and *Lavender*, and in Consequence of its abounding with a penetrating balsamic Oil, it is very good in all Disorders of the Head, with Spirit of Lavender. *Arnoldus de Villa nova* affirms, that he has often seen Cancers, Gangrenes, and Fistulas dried up and perfectly cured, though they would yield to no other Medicine; by frequently washing them with an Infusion of Rosemary in Spirit of Wine. The Leaves bruised and made up in the Form of a Paste, and swallowed, powerfully strengthen the Stomach, and rouse the Spirits. Put into a Bath they are excellent against Barrenness; externally they strengthen the Nerves, prevent Gangrenes, and resolve cold Humours. Of Rosemary Flowers gathered in the Middle of the Day bruised with Sugar, and afterwards preserved from the Air in a Galley Pot, is made the celebrated English Conserve, called in the Shops, *Conserva Florum Antbos*, which is an excellent Remedy in Vertigoes arising from a cold Cause, as also in cold Distempers, in Consequence whereof it is an excellent Stomachic, and proper in that Disorder of the

Eyes called *Lema Lippea*, when not Proceeding from an Inflammation.

Ros Solis, Offic. *Ros Solis folio subrotundo*, C. B. P. *Ros Solis*, *Ros Ja Solis*, *Sponsa Solis*, *Rorida* & *Rorella etiam dicta*, Chab. *Rosa Solis*. It grows in boggy Grounds, and flowers in June and July. The Virtues of this Plant are much controverted, some recommending it as good for the Phthisis, and Plague, whilst others, not without Reason, forbid the internal Use, on Account of its caustic Qualities.

Rubia Tinctorum, Offic. *Rubia tinctorum sativa*, Boerh. Ind. Alt. *Rubia major sive bortenfis*, Park. Theat. Madder. It grows in Fields and Gardens. The Plant is vulnerary, and chiefly used in Obstructions of the Liver, Spleen, and particularly the Uterus; hence it is good in the Jaundice, Dropsy, Obstructions of the Urine, and Coagulations of Blood. The Dyers use it for preparing a red Colour.

Rubia sylvestris, & *Rubeola*, Offic. *Rubia sylvestris Monspensulana major*, J. B. Wild Madder. It grows in Hedges, flowering in the Summer; the Root is used, which agrees in Virtues with the former.

Rubia Synanchica, Offic. *Rubia Cynanchica*, C. B. P. *Synanchica Lugdunensis*, Ger. Emac. Squinancy Wort. It grows in barren and chalky Places, flowering in the Summer. The Herb is used, which is said to be of extraordinary Efficacy in the Quinsy, whether inwardly or outwardly used.

Rubus Vulgaris, Offic. *Rubus Vulgaris sive Rubus Fructu nigro*, Boerh. Ind. Alt. *Rubus Vulgaris major*, Park. Theat. The Bramble, or Blackberry Bush. It grows in Hedges and Thickets, and flowers in May, and produces its ripe Fruit in August. The Part in Use is the Leaves, tender Sprouts, and Fruit,

which are drying and strong Astringents. The Fruit is temperately heating, and subastringent; it is chiefly used in Fluxes, Vomiting, Fluxes of the Belly, and Hemorrhages of the Uterus and Nostrils; externally applied it is good in Aphthæ and other Disorders of the Mouth, as a Detergent, and is recommended as an Astringent in Wounds. It renders the Hair black, and cures the Scurvy. A Decoction of its Branches, according to *Dioscorides*, stops a Looseness, and the *Flux albus*; its Leaves chew'd cleanse Ulcers of the Gums and Mouth, and bruised and applied to Tetters; it likewise kills them, and also cures the Piles. *Galen* made Use of the Leaves for Wounds; of the Flowers and Fruit for spitting of Blood; and of the Root for the Stone. *Tabernaemontanus* says, that a Bolster dip'd in the Juice of the Bramble, and put into the Fundament, stops the Flux of the Piles.

Rubus repens fructu Cæsis, C. B. P. *Chamaebatos*, Offic. *Rubus minor fructu cæruleo*, J. B. The Dew Berry. It is found amongst Corn, and flowers in May, and produces its ripe Fruit in Autumn; the Fruit is in Use, and agrees with the *Rubus Vulgaris*, or the Bramble, or Blackberry Bush, in Virtues.

Rubus Idæus, Offic. *Rubus Idæus spinosus, fructu rubro*, Boerh. Ind. Alt. J. B. The Raspberry Bush. With us they are cultivated in Gardens, but grow spontaneously in some Parts of Wales, and the North; it flowers in May, and the Fruit is ripe in June, which is the only Part used; it has a pleasant grateful Smell and Taste, is cordial and strengthens the Stomach, stays Vomiting, is somewhat restraining, and accounted good to prevent Miscarriages. Raspberries are of a moistening and cooling Nature, cordial, and fortify the Stomach,

Stomach, they sweeten the Breath; they are likewise esteemed antiscorbutic and antinephritic.

Rubus Saxatilis, Ger. *Chamærubus*, Offic. *Rubus Alpinus humilis*, Boerh. Ind. Alt. Stone Bramble. It is a Native of Mountains and rocky Places, and flowers in June; the Berries are used, which agree in Virtues with the *Rubus Idæus*.

Ruscus. Butchers Broom. See *Bruscus*.

Ruta, Offic. *Ruta major hortensis latifolia*, Boerh. Ind. Alt. *Ruta sativa vel hortensis*, J. B. Garden Rue. Rue is planted in Gardens, and the Leaves and Seed are used. The whole Plant has a very strong Scent. This Plant was greatly esteem'd by the Ancients, which will appear by its being the principal Basis of the famous Antidote of *Mithridates*. It abounds with a highly, acid, and penetrating Oil, capable of stimulating the most languid Fibres to a brisker Motion, and consequently imparting an additional Strength to them. The Leaves of Rue mixed with recent Butter, and eaten in a Morning with Bread, are beneficial to those who abound with Phlegm, and an excellent Preservative against the noxious Influences of a moist and vapid Atmosphere, and the contagious *Miasmata* of epidemical Disorders. The Leaves bruised with Pepper, common Salt, and strong Vinegar, and applied to the Arteries of the *Carpus*, provided the morbid Matter is before duly managed, excellently check the febrile Impetus, and are often used with more Efficacy and less Danger in stopping obstinate quartan Fevers than internal Astringents, and the so much celebrated *Peruvian Bark*. Strong Wine Vinegar richly impregnated with the Juice of Rue, applied to the Mouth and Nostrils, is not only an excellent Preservative against the Contagion

of epidemical Disorders, but also more effectual in preventing Deliquiums than all the cephalic rich balsamic and apopleptic Spirits. It provokes the Menstrues, and expels the Lochia, Fœtus, and Secundines, and drank in the Morning instead of Tea, and the Vapour received into the Eyes, sharpens the Sight; the Seed is commended for the Worms and a Gonorrhœa, and consumes the Semen by its excessive Heat and Dryness; the Herb is of Service in the Small Pox, Measles, Epilepsy, lethargic Disorders, and the flatulent Colic. Externally used it is good for cold, humid, and watry Tumors. A Cataplasm is prepared of Rue bruised and boild with Wine which resists an Inflammation. Rue may be given inwardly in the most acute Diseases.

Ruta Capraria. Goats Rue. See *Galega*.

Ruta montana, Offic. *Ruta sylvestris major*, J. B. Wild Rue. It grows on hilly Places, flowering in July. The Herb is used, which agrees in Virtue with the common Rue, but is more acrid.

Ruta muraria. See *Adiantum album*.

Ruta sylvestris. See *Harmala*.

Sabina, Offic. *Sabina folio Tamarisci Dioscoridis*, Boerh. Ind. Alt. *Sabina Vulgaris*, Park. Theat. Savine. It is cultivated in Gardens, but seldom produces Fruit. The Tops are used, which are of a hot, drying, opening, and attenuating Quality, incising and discutient; they are a powerful Provoker of the Menstrues, expel the Fœtus, and provoke Urine. Externally applied, they are good in all Uterine Disorders. Mr. Ray recommends the Juice of Savine mixed in Milk and sweetned, as an excellent Destroyer of Worms; beaten into a Cataplasm with Hog's Lard, it cures scabby Heads in Children. *Boerhaave* asserts, that a Water

Prepared from *Savine* by frequent Cohobations, is a most excellent Ec-bolic, Emmenagogue, and Promoter of the Hæmorrhoids; that the chymical Oil of *Savine* is a potent Provoker of the Menfes, when the Retention proceeds from Languor and Debility. A Cataplasm of the Seeds bruised with *Sal Gem* and Oil, is said to be excellent for an Anchy-losis.

Sabina baccifera, J. B. *Sabina folio Cypressi*, Boerh. Ind. Alt. *Sabina baccifera major*, Park. Theat. Berried *Savine*. This Species, as well as the former, is cultivated in Gardens; the Herb is used, which is inciding, attenuating, powerfully provokes the Menfes, and Secundines, and kills Worms.

Saccharum. Sugar. This is produc'd from the *Arundo Saccharina*, J. B. *Arundo Saccharifera*, C. B. P. *Canna Saccharifera*, Ogilb. Chin. *Vulba & Tacomaree Brasiliensibus*, Marcg. The Sugar Cane. Sugar is an artificial Concrete, prepared from the Juice of this Cane, by boiling it gently in Copper Vessels: this occasions the lighter Feculencies to rise to the Top, from whence they are carefully scummed off; while the more ponderous subside to the Bottom of the Vessel. The purified Syrup is then mixed with a due Portion of Lime Water, and gently boiled; which disposes it to granulate, or form saline Concretions. These are separated from the more liquid Parts by suitable Contrivances. By this means, the Juice of the Cane is made to assume the Form of coarse Sugar: this is still further purified, by the Addition of Quick Lime, and repeated Coction. When it is, by these means, brought to a due Consistence, it is poured out into conical earthen Moulds, having a Perforation at their smaller End, which is placed lowermost: through this Hole, the *Molasses*, or coarser Syrup, drains, while the purer Sugar

is left behind, in a solid Mass, or Loaf. A weak Solution of Sugar, expos'd to a gentle Warmth, soon loses its Transparency, ferments, and is converted into a genuine Wine, which upon Distillation yields a pure inflammable Spirit. If the Fermentation is promoted or continued for a sufficient Length of Time, an excellent Vinegar is formed. Sugar, thrown upon live Coals, emits a copious Fume and at length burns with a clear Flame leaving behind it an earthy Substance. Distilled in a close Vessel, it yields an acid Spirit, and an Empyreumatic Oil, a black Coal remaining at the Bottom of the distilling Vessel, from which, after it is thoroughly calcined, may, according to *Geoffroy*, be obtained a small Portion of fixed Salt. Sugar, boiled along with Vegetables, imbibes their resinous and mucilaginous Substance. Ground with distilled Oils, it renders them perfectly miscible with Water. *F. Hoffman*, speaking of Sugar, says, that as it is a temperate Salt, friendly to Nature, and capable of producing an intimate Union of oleous and pinguious Parts with Water; hence appears the Reason why some both among the Ancients and Moderns, used to mix Honey, Sugar, Figs, and dried Grapes with the Food intended to fatten old Animals; for the pinguious Parts of the Aliments, which when intimately incorporated with the most aqueous Parts, constitute the Milk and Chyle, are by this means more quickly dissolved, united with the aqueous Parts, and form a large Quantity of Chyle, which is conveyed with the Blood to all the Parts of the Body. Hence also appears the Reason, why either Honey or Sugar mixed with Milk, prevents its Elaboration into Butter; for the Sugar more firmly unites with the Phlegm the numerous oleous Particles in the Cream, whereas, in order to the Churning of Butter, or its

Collection into one Mass, these ought rather to be separated and disjoined from each other. Hence we may also learn, that Sugar is not so unfriendly to the Mixture of the vital Fluids, as is commonly believed, since it neither induces any Change in the Blood, Milk or *Serum*, when mixed with them, but rather by stimulating the Intestinal Fibres, facilitates the Excretion of the *Fæces* by Stool. And as it greatly promotes the Union; of the oleous with the aqueous Parts of the Aliments, hence 'tis probable, that it greatly contributes to the Generation of a large Quantity of Chyle. This accounts for the usual Method of fattening Capons and Geese, by mixing a little Honey, Sugar, or Salt with Wheaten or Barley Meal for their Food. It has been a Point much disputed whether Sugar in general is wholesome or otherwise. According to some it is temperate, heating, Emollient, Resolvent, Purgative, and calculated to resist Putrefaction, good for the Stomach, Lungs, and Breast, for Coughs and all Diseases of the *Thorax*, promotes Expectoration, softens internal Tumors, cleanses Ulcers of the Kidneys, Bladder and Intestines, and hinders all Corrosive Substances from acting easily on the internal Parts. According to others it is injurious to scorbutic, hypochondriac, hysseric, cachectic and feverish Patients, if used in considerable Quantities. Others assert, that it soon becomes acedent in the Stomach and *Primæ Viæ*, that it weakens Digestion, and produces Flatulencies, impairs the Appetite, and generates Gripes and Dysenteries. It is also said to lay a Foundation for the Piles, and some foreign Physicians have ascribed the frequent Consumptions in *England* to the copious Use of Sugar. Some Authors affirm, that Sugar generates Worms,

others, on the contrary, are as positive that it destroys them. It is however generally agreed, that the common coarse Sugars foul the cutaneous Glands, and excite scorbutic Spots and Blotches. Sugar, in some Degree, differs in medicinal Virtues according to its Degree of Fineness; thus the *Muscovado*, or Sugar first procured from the Cane, is more relaxing and purgative, and consequently more proper in Clysters, and cathartic Syrups. The *Cassonada*, or Sugar once refin'd from the former, is something less relaxing, and more proper for internal Uses. The Loaf Sugar, or *Cassonada* still further refin'd, is said to be more detensive; they both cut Phlegm, promote Expectoration, and animate the Blood; but they excite Vapours and the Tooth-ach. They who use much Sugar are liable to Fevers, and to rotten Teeth. In *Brasil*, the Skimmings of Sugar are given to the Hogs, by which they are soon fattened, and their Flesh becomes very delicate. *Sugar Candy*, or Crystals of Sugar, is of three Kinds, white, yellow, and red, which are only the three former Sorts boiled to a due Consistence. White Sugar Candy comes from the *Loaf Sugar*, yellow from the *Cassonada*, and red from the *Muscovado*. Sugar Candy is most proper in Colds, because it melts slowly, and thereby gives Time to the *Saliva* to mix with it; and thus to blunt the Acrimony of the Phlegm.

There is another Species of Sugar called *Maple Sugar*, which is produced in *Canada* and *New England*, in which Countries the Natives collect the Juice that runs from a Kind of Maple Tree, by Incision, and then evaporate that Juice to the Consistence of Sugar, which while it remains unctuous, is better for internal Use than any other Kind; and the

the famous Syrup of Maiden Hair of *Canada* is made with it. As it is brought to us, it is of a greyish Colour, and tastes like other Sugar.

Sagapenum, Offic. Park. Theat. *Sagapenum Veterum*, J. B. This Gum is brought to us from *Alexandria*; is attenuating, aperient, and purges viscid, thick and ferous Humours from the Stomach, Intestines, Uterus, Reins, Brain, Nerves, Joints, and Breasts; in consequence whereof it is good in a Dropsy, inveterate Coughs, Asthmas, Cephalalgias, Spasms, Epilepsies, Palsy, Tremors of the Limbs, in Obstructions and Tumours of the Spleen, and Colic Pains, it provokes the *Menses* and Urine, but kills the *Fœtus*.

Sagitta, Offic. *Sagitta Europæa aquatica minor latifolia*, Boerh. Ind. *Sagittaria Europæa minor latifolia*, Hist. Oxon. Arrow-head. It grows in Rivers and watry Places, and flowers in *May* and *June*; the Herb and Seed are both used, and are of a cold and moist Temperament, and possess the same Virtues as the *Plantago Aquatica*. This was the Opinion both of *Matthioli* and *Boerhaave*, but the Smell and Taste speak it of a hot Nature.

Sagittaria Alexipharmica, Offic. *Canna Indica*, radice alba *Alexipharmica*, Raii Hist. Radix quædam in *Malaca* quæ adversus vulnera *Sagittis toxico illitis facta*, præsentaneum remedium est, C. B. P. Arrow Root, Dart Wort. This Plant grows in the Gardens in *Jamaica* and the *Charibbee* Islands, whither it was transplanted from the Island of *Dominica*, and is greatly esteem'd for its Alexipharmic Virtue, and extraordinary Efficacy against Wounds inflicted by poisoned Darts and Arrows, for which purpose it is frequently used by the *Indians*, who apply the bruised Herb to the Part afflicted.

Sagou, Offic. *Palmm referens Arbor Farinifera*, C. B. P. *Arbor Farinifera*,

Park. Theat. *Zagu seu Arbor Farinifera*, Jons. Dendr. *Todda-panna seu Monta-panna*, Commel. Flor. Mal. Sago Tree, Indian Bread, or Libby Tree. It grows in several Places of the *East-Indies*, and the Pith of the Tree is used, which being well beat in a Mortar with Water, forms an Emulsion, the *Fæcula* of which dried is *Sago*. It is a very kindly and nourishing Food, never fermenting in the Stomach, and very proper in *Hæctic Fevers*. It is very much used in *England*.

Salicaria. See *Lyfimachia Purpurea*.

Salix, Offic. *Salix vulgaris alba arborescens*, C. B. P. Common Willow. It grows in watry Places, and by the Sides of Brooks. The Leaves are used, which are refrigerating, and somewhat astringent; tho' their principal Use is in restraining venereal Inclinations. Outwardly they are of Service in *Hæmorrhages* from Wounds, or from the Nostrils, and the like Disorders, and are of Service in Baths for the Feet, in order to procure Sleep, and cool the Heat of Fevers. The Ashes of the Bark of this Tree are effectual for extirpating Warts and Corns.

Salix rubens, Offic. *Salix vulgaris rubens*, C. B. P. Common red Willow. It grows in watry Places, and the Leaves are used, which agree in Virtue with the former.

Salix Helice, Offic. *Salix Rosea*, Park. Theat. Rose Willow. It grows by the Sides of Brooks, and is esteem'd not different from the preceding.

Salsaparilla, Offic. *Smilax aspera Peruviana sive Salsaparilla*, C. B. P. *Ivapecanga vulgo Sarsaparilla herba*, Pison. *Mecapatli seu Zarca-parilla*, Hernand. *An Cari-willandi*? H. M. Sarsaparilla. It is of fine Parts, and accounted a Specific for the *Lues Venerea*, *Arthritis*, *Rheumatism*, and the like Disorders. *Sarsaparilla* is a very noted Root, which began to be very much celebrated, about the

same

same Time with the *China Root*, as appears from an Epistle of *Vesalius*. It is inferior indeed to *Guaiacum*, but it is generally supposed to be much superior in Virtue to *China Root*, and even to exceed *Guaiacum* itself, when after a Course of Mercurial Inunctions, and drinking Decoctions of *Guaiacum*, the Patient is still molested with Ulcers, *Rhagades* about the *Anus*, *Tophi*, *Nodes*, *Ganglia* and *Gummata*; but especially with Rheumatic Pains, either fixed or wandering, and owing their Original to the venereal Infection, in which latter Case it is esteemed a Specific. It is imported from several Countries of *America*, and especially from *Peru*, *Mexico*, and *Brazil*, where it is said to grow spontaneously, and plentifully, even in the Hedges. It is generally believed to be the Root of a Plant, the same with the *Smilax Aspera*, or very near akin to the *Smilax*. Hence it is called by the *Spaniards* *Sarsa-parilla*, or *Zarzaparilla*, (that is, a small Vine resembling the Bramble) which is the Name they give the *Smilax Aspera*, as we are told by *Andreas Lacuna*; because the *Smilax* in its Leaves, Branches, and Tendrils, resembles the Vines, but in its Thorns and Prickles the Bramble; for *Zarza* in *Spanish* is a Bramble, and *Parilla* a little Vine. This Opinion is also favoured by Experience; for it is certain, that the Roots of our *Smilax Aspera* very nearly resemble in Figure those of *Sarsaparilla*, and almost equal them in Virtue; since we are assured by *Fallopius*, that he made use of the Roots of the *Smilax Aspera* gathered in *Italy*, with happy Success, and cured Multitudes of the *Lues Venerea*. *Sarsaparilla* is prepared in Decoction, after the same Manner as *China*, that is, by cutting two Ounces of the Root into small Bits, and macerating them a whole Day in six Pints of common Water;

after which they boil them over a gentle Fire, in a double Vessel well closed with a Lid, till one third, or half be evaporated. Of this Decoction the Patient is to take a Glass, that will hold ten Ounces, very early in Bed; what remains serves during the rest of the Day for ordinary Drink, and this Course is continued for twenty or twenty four Days. As to the rest, the Patient is allowed a somewhat greater Latitude in Diet, than under the Use of *Guaiacum*, and observes in that Respect, the same Regimen as is prescribed to those who drink the Decoction of *China*.

Salvia hortenensis major, Offic. *Salvia major vulgaris*, Park. Theat. Common Sage. It grows in Gardens, flowering in *June*, and the Leaves and Flowers are used. Sage is diuretic; it provokes the *Menses*, when retained thro' Thickness, and moderates their Excess; it is also serviceable in Palsies, Vertigoes, Tremblings, and Catarrhs; outwardly it ablerges Aphthæ in the Mouth. It is an excellent Cephalic, and was always highly esteemed by the Inhabitants of the Eastern Nations, who at present prefer its dried Leaves to Tea. In consequence of the subtil, vaporous, and sedative Oil it contains, a Decoction or rather Infusion of it by way of Tea, is highly efficacious in Spasmodic Contractions, in Contractions of the Members, and Chronical Epilepsies. In order to allay Inflammations of the Fauces, and other Disorders of the Teeth and Mouth, Surgeons order a Decoction of Sage to be used as a Gargarism. It takes its Name *Salvia*, from *Salvus*, sound, healthy, because no Plant has a greater Reputation for Healthfulness and Wholesomeness, whence the Question in the old Verse:

Cur moriatur Homo cui Salvia crescit in Horto.

Why

Why dies the Man, whose Garden Sage affords?

Sage has a very fragrant Smell, and if smell'd to for a considerable Time, causes a Sort of Ebriety, and at length a Vertigo. Drank after the Manner of Tea, it is astringent, stimulates the Fluids, and corroborates and dries the Fibres and Bones. It is justly, therefore, by *Dioscorides*, esteemed a most effectual Sudorific, Cardiac and Cephalic, and has given Occasion for the Verse in the *Scholia Salernitana* above cited. It is of Service in the Gout, Vertigo, *Leucophlegmatia*, and *Chlorosis*, or Cachexy of Virgins: It is subject however, to one very great Inconvenience, which is, that it harbours Toads under its Roots; the Way to avoid which, is to plant near it Rue, which these Animals cannot endure. Sage indeed was by the Antients justly esteemed Alexipharmic, Sudorific, and especially Cephalic, but it was only in cold Diseases, where Phlegm abounded. The distill'd Water, and the Conserve of the Flowers were usually exhibited as Preservatives against all Sorts of Poison, by their sudorific and strengthening Virtues. A Conserve of Sage is very proper for a Weakness of the Stomach in Women, for those of that Sex who have for Years together laboured under an Infirmary, or Debility of the Stomach, are said to be cured by taking half a Dram of the Conserve.

Salvia hortensis minor, Offic. *Salvia minor aurita* & *non aurita*, C. B. P. Sage of Vertue. It grows in Gardens, flowering in June. The Leaves and Flowers are used, which agree in Virtues with the former.

Salvia folio tenuiore, C. B. P. *Salvia Indica*, Ger. Emac. Spanish Sage. It is cultivated in Gardens, and the Leaves are used, which agree in Virtues with those of the common Sage.

Salvia Vita. A Name for the *Adiantum Album*.

Sambucus, Offic. *Sambucus vulgaris*, J. B. Common Elder. It grows in Hedges, flowering in May. Its Leaves have a Taste at first herbaceous and saltish, afterwards bitter. The Fruit is sweetish, and gives a deeper Red to the Blue than to the White Paper. Its Leaves yield, by the Chymical Analysis, beside some acid and ascacine Liquors, some volatile concrete Salt, a great deal of Earth and Oil. Thus it may probably operate by a *Sal Ammoniac*, loaded with more acid than ordinary, and joined with a great deal of Oil and Earth. The Salt of the Elder-Berries resembles Alum rather than *Sal Ammoniac*. It affords only a little urinous Spirits from these Parts, but a great deal of acid, Oil and Earth. *Bartholine* informs us, that Elder is at once more safe and efficacious, than the celebrated artificial Antidotes *Theriaca* and *Mithridate*. The Flowers and Rob of Elder are highly and justly esteemed by the common People; for the former are with great Success externally applied for alleviating all Erysipelaceous Swellings, Tooth-achs and Gouts; as also for softening Abscesses and hard Tumours, produced by coagulated Milk. The Water of these Flowers, in consequence of its Anodyne Quality, is of singular Efficacy in all Diseases, whether acute or chronic; but especially in those Disorders where Expulsion is proper, where the Pain is intense, and where there is an Inflammation of the internal Parts. The Rob prepar'd of Elder-Berries, is as it were, the *Panacea* of the Country People, who use it as the best Preservative, and the safest Medicine in the Beginning of Diseases, mixing it either with warm Ale, or Elder Flower Water; for it not only provokes the Excretions by Stool and Perspiration, but it is also possessed of

an Anodyne Quality. Some, in order to render this Rob more diaphoretic, add about a Dram of calcined Hartshorn to it. If this Rob is mixed with an equal Quantity of Sugar Candy, and a due Quantity of Brandy is poured upon the Mixture, and kindled after a sufficient Agitation, it affords a Medicine, one Spoonful of which is of excellent Service in long protracted Coughs, and before the Paroxysm of Intermittent Fevers. The frequent Use of this Rob generally mitigates, and sometimes stops the *Impetues* of these Fevers, provided the Crudities of the *Primæ Viæ* have been previously treated with Laxatives and Correctors. The middle Bark of the Elder Tree, if boil'd in Ale, Water, or Wine, powerfully promotes Sweat, Urine, and the *Menses*, for which Reason, it is highly proper for Cachectic Patients. This Bark when externally applied, removes oedematous and erysipelaceous Swellings; as also Pains and Tumours of all Kinds. The Leaves and Tops are commended by *Dioscorides* in the Hysteric Passion, Inflammations, Combustions and Gout.

Sambucus humilis, Ger. Emac. *Ebulus*, *Chamæactæ*, Offic. *Sambucus humilis*, sive *Ebulus*, C. B. P. Dwarf Elder, or Dane-wort. It grows in Path Ways, flowering in June. The Leaves are a little bitter, and the Fruit more so. It is styptic, and does not redden the blue Paper. By the Chymical Analysis, the Leaves and Tops yield a little acid and urinous Spirit, no concreted and volatile Salt, and a good deal of Earth and Oil. The Leaves are emollient and resolvent, and are used as a Cataplasma for the Gout, and all Kinds of Tumours. The young Shoots and Bark are purgative. Half an Ounce of its Seeds, infused in a Glass of White Wine, is a proper Remedy for Hydropical Persons. The Oil expressed from the Seed is sweetening and re-

solvent. This Herb is a *Succedaneum* to the former. For Affections of the Spleen, take of distill'd Water of Dwarf, to the Quantity of about four Ounces, for ten or twelve Days in the Morning fasting. This was an approved Prescription of *Du Val*, for Pains, Inflammations, and Obstructions of the Spleen. The Leaves of the *Ebulus* being bruised and applied, are no less effectual in curing Combustions, than those of the *Sambucus*. The Berries, as well as those of the former, dye the Hair.

Sambucus Montana, Offic. *Sambucus racemosa rubra*, C. B. P. Mountain Elder. It is cultivated in Gardens, and the Leaves are used. It is cold and soporiferous, and agrees in Virtues with the *Belladonna*.

Sampfucum. A Name for the *Majorana*, or Sweet Marjoram.

Sanamunda, Offic. *Sanamunda prima Clusii*, Ger. *Thymelæa foliis Chamelææ minoribus subbirsutis*, C. B. P. *Tarton-raire Massiliensum*, Park. Theat. Heath Spurge. It grows spontaneously in *Provence* in *France*, and the Leaves are used, which are said to be possess'd of a Caustic Quality.

Sandaracha, Offic. *Vernix Arabum*. This is a Gum Resin, which flows from the *Cedrus Lycia major*, *Dodon*. It is attenuant and resolvent, but it is seldom used in Physic, though very much by the Varnishers, being first dissolved in Spirit of Wine. It is sometimes confounded with Juniper Gum, and is very different from that Kind of Orpiment, which was the *Sandaracha* of the antient Greeks.

Sanguis Draconis. Dragon's Blood. This is already specify'd under the Article *Draco Arbor*.

Sanicula, Offic. *Sanicula sive Diapensa*, Ger. Emac. Sanicle. It grows in Woods and Hedges, flowering in May. The Leaves are principally used as a Vulnerary, and are useful

in consolidating Ulcers, Fistulas, Ruptures, and Erosions. By the Chymical Analysis, beside several acid Liquors, Sanicle yields an urinous Spirit, and some concreted volatile Salt, and a great deal of Oil and Earth. It contains some *Sal Ammoniac*, Sulphur, and terrestrial Parts. It is deterfive and aperitive. Sanicle is greatly commended by the *French* and *Walloons*, who eat it for Inflammations. *Baubine* thinks it proper in hot Diseases of the Kidneys. It is a useful Plant in a Languor, and Decays, from a Viscousness of the Humours. It is of a penetrating, Balsamic Virtue; for it has an acrid Sort of a Fragrancy, in which consists its Virtues, and leaves an astringent Taste in the Mouth. It is serviceable in *Hernias*, and *Hæmorrhages*, and in discussing Tumors, by Resolution or Dissipation, the Leaves being bruised, and applied with Wine or Vinegar. The Decoction is taken inwardly, to dissolve grumous Blood, and is good in Fractures, where Purgation and Absterion are required.

Sanicula Montana. Bear's-Ear Sanicle. See *Cortusa*.

Santalum. Sanders. The white and yellow Sanders of the Shops, are produced by the same Tree; the cortical Part of which, according to many, is called white Sanders, and the medullary Part, yellow Sanders: But *Garcias* informs us, that there is so great a Resemblance between the Trees, which bear the white and yellow Sanders, that they cannot be distinguish'd, except by the Inhabitants who sell them to the Merchants. Yellow Sanders, is the Marrow of a certain Berry bearing Tree, called *Sarcante*, in the Island of *Timor*; which, when separated from the Integuments, is solid, thick, and of a yellow Colour, of a bitterish aromatic Taste, and fragrant Smell. This Commodity is brought from *China* and *Siam*, and the Tree itself is tall, like a Walnut

Tree, but bears Fruit resembling Cherries. The white Sanders is the paler Marrow of the same Tree, of a fainter Smell, and less aromatic Taste. When these Trees are dried, the Marrow alone is chosen; which, if it is not sufficiently odorous, is called white Sanders. Yellow Sanders derives its fragrant Smell, and aromatic Taste, from the tender Resin, contained in it, and which is easily extracted, by infusing the Shavings of it, in a sufficient Quantity of highly rectify'd Spirit of Wine. By Digestion, a very yellow Tincture is extracted from it, which when inspissated over a gentle Fire, after the Spirit is abstracted, constitutes a liquid Balsam, of a darkish Colour, and grateful Taste, and which in Consistence and Colour, almost approaches to *Peruvian* Balsam. And if this Balsam is again dissolved in highly rectify'd Spirit of Wine, it makes a Balsamic Essence of singular Virtue. This Experiment excellently illustrates the Nature and Generation of the *Peruvian* Balsam, the Balsam of *Capivi*, and that of *Meccha*, which are nothing but liquid Resins; for if the resinous Principle of Sanders is dissolved in highly rectify'd Spirit of Wine, and the Solution inspissated, it assumes the Consistence of a Balsam, and is no more converted into a solid Resin, since some moist Particles have by this means intimately insinuated themselves into its Composition. The Essence of yellow Sanders, is of the same analeptic and sedative Virtue with Amber, and is highly beneficial in Disorders, arising from a Weakness, and want of Tone in the nervous and membranous Parts; for which end, it may either be used by itself, or in Conjunction with the Essence of Aloes Wood, or Amber. Both the yellow and white Sanders are refrigerating, drying, and aperitive, hepatic and cordial. Their principal Use is in

a Lipothymy, Palpitation of the Heart, and Obstructions of the Liver, and the like Disorders. Outwardly they are of Service in Catarrhs, Head-achs, Vomiting, and the like.

Santalum rubrum, Offic. Red Sanders. It grows in the *East-Indies*, beyond the River *Ganges*. The Part in use is the Wood, or rather the Heart, separated from the outer Integuments, the Bark and Wood, and of a solid, dense, ponderous and red Substance. This Species of Sanders is refrigerating and astringent. Whatever Virtues, therefore, are by the *Arabians* ascribed to the several Sorts of Sanders, against preternatural Heats, and the like Kinds of Disorder, belong in a more especial Manner to red Sanders.

Santonicum & *Semen Sanctum*, Offic. *Sementina*, Ger. Emac. *Lumbricorum Semen vulgare*, & *Matthioli*, J. B. Wormseed. It is brought from *Alexandria*. The Seeds, which are the Part used, are small, oblong, yellow, and of an acrid, bitter, and disagreeable Smell. They seem to be formed of small Scales, inclosing each other. These Seeds are in great Reputation, for their Virtues in killing Worms.

Santonicum viride, Offic. *Chouan*, Pomet. Green Wormseed. It is like the former, but is larger, and of a green Colour, inclining to a yellow. The Virtues are the same as the former.

Saponaria, Offic. *Saponaria major lewis*, C. B. P. *Lychnis sylvestris*, quæ *Saponaria vulgo*, Tourn. Inst. Sope-Wort. It grows near Rivers, tho' but seldom; flowering in *July*. The Herb and Roots are used. It is greatly attenuating, aperitive, and sudorific. It is used in the *Asthma*, to provoke the *Menses*, and in the *Lues Venerea*. Externally used, it is a good *Psalmic*; and is principally used to discuss Tumors and Boils.

Sarcocolla, Offic. C. B. P. *Sarco-*

col. This is a Gum which comes from *Persia*, in small whitish Grains, with a few of a reddish Colour mixed among them, of a viscid, and somewhat bitterish Taste, with a sweetish Relish. Chuse what is recent, of a Colour inclining to Pale-ness, (for the old and stale is reddish) of a bitter Taste, a porous and glutinous Substance. It is healing, drying, astringent, consolidating, conglutinating, digestive, and maturing. Its principal Uses are, in exterging, and consolidating Wounds, and inducing a *Cicatrix* over them, whence it has its Name. It is of excellent Service in Rheums, an Albugo, or Films, affecting the Eyes: For which Purposes it is macerated five Days, in Asses or Womens Milk; and being mixed with Rose Water, with a little Sugar, is applied to the Eye-Lids. It is an Ingredient in *Anacollema's*, for Hemorrhages of the Nose.

Sarsaparilla. The same as *Sassa-parilla*.

Sassafras, Offic. Park. Theat. *Arbor Sassafras Monardi*, Pluk. Phytog. *Arbor sive Lignum Pavanum*, J. B. *Anhuiba sive Sassafras Brasiliensium*, Pison. The *Sassafras* Tree. It grows in several Parts of *America*. It is principally of Use in removing Obstructions, and strengthening the internal Parts; in causing Fertility, and curing the *Lues Venerea*. It is accounted a *Panacea* or Sovereign Remedy for Catarrhs. Much about the same time, with the other anti-venereal Woods and Roots, was imported the Wood called *Sassafras*, from several Parts of *America*, but principally from *Florida*, where the Natives call it *Pabamwe*, as we are told by *F. Coreal, Voy. aux Ind. Occid.* *Sassafras* is of a reddish Colour, inclining to white, ligneous, of a light and rare Substance, contained under a thin Bark, which is ash-colour'd without, and sanguineous within, of

an acrimonious, sweetish, and aromatic Taste, and of a fragrant Smell; whence it is usually called *Lignum Fœniculi*, or *Fœniculatum*, Fennel Wood. There was prepared and used, a Decoction of *Sassafras*, after the same manner as the Decoctions of *China* and *Sarsaparilla*: but as *Sassafras* comes next to *China*, in Virtue of curing the Symptoms of the Venereal Disease, so it is very much inferior in that Respect, to *Guaiacum* and *Sarsaparilla*. It has been the Custom for a long time past, to take the two Woods, *Guaiacum*, and *Sassafras*, with the two Roots *China* and *Sarsaparilla*, which are all of a like Nature and Virtue; and boil them together, generally without any Cathartic, but sometimes with Leaves of *Senna*, which was the Fashion since the Year 1550, as we are informed by *Brassavolus, de Radicis Chinæ usu*. Of these Drugs in Conjunction, then, were prepared Decoctions and *Bocheta*, which were sometimes only diaphoretic and diuretic, but sometimes cathartico-diuretic, and very commonly known by the Names of *Ptisane Sudorifera*, or *Ptisane e Lignis sudorificis*. The Proportions of the Ingredients were various, according to the different Intentions which were to be answered. Generally they took two Ounces of *Lignum Guaiacum*, in Dust, or small Chips, or as many Ounces of Wood of *Sassafras*, cut likewise very small, and the like Weight of the Roots of *China* and *Sarsaparilla*, each cut into very small Bits, and infus'd them warm, in ten or twelve Pints of common Water, for twenty four Hours. After this, they added thereto, if it was thought requisite, two Ounces of crude Antimony, grossly bruised, and loosely tied up in a Nodule; and boil'd the whole over a gentle Fire, in a Vessel covered with a Lid, to the Consumption of a third Part: after which, they added thereto, an Ounce

of Scrapings of Liquorice; and if they would have it purge, half an Ounce of the Leaves of Oriental *Senna*, which were to boil a Moment. This done, when warm, they strain'd the Decoction, and set it aside in Glass Bottles, well stopped, for Use. The Custom was, to take three Draughts of this Decoction every Day, for twelve or fifteen Days together; the first in the Morning fasting, the next four or five Hours after Dinner, and the last, going to Bed; or at least two Draughts, that is to say, in the Morning and Evening; omitting the Afternoon's Draught, if it should be thought proper. During the Time of taking it, the Patient was to be kept to a sparing Diet, and to confine himself at Home, if the Season of the Year requir'd it.

Satureia, Offic. *Satureia hortensis* five *Cunila sativa* Plinii, C. B. P. Summer Savoury. It is sown in Gardens, flowering in June. The Herb is used, which is one of those hot and acrimonious Herbs, which provoke Urine and the *Menses*, and is supposed to have much the same Virtues with Thyme and Hyssop.

Satureia montana, C. B. P. *Thymbra*, Offic. *Satureia vulgaris*, Park. Theat. *Calamintha frutescens*, *Satureiæ folio, facie & odore*, Tourn. Inst. Winter Savoury. It is cultivated in Gardens, flowering in the the Summer, and the Herb is used; which agrees in Virtues with the preceding.

Satureia Cretica, C. B. P. *Thymbra vera*, Offic. *Satureia Cretica folio rigido, brevi, crasso*, Boerh. Ind. Alt. True Savoury. It is found in the Island of Crete. The Herb is used, which provokes Urine, and the *Menses*; and is of great Service, being mix'd with Honey, for Coughs.

Satureia spicata, Offic. *Satureia St. Juliani*, five *Satureia vera Lobelio*, Tourn. Inst. Rock Savoury.

voury. It grows on Hills and Walls, flowering in the Summer; and the Herb is used, which agrees in Virtues, with the other Species of Savoury.

Satyrion mas, Offic. *Orchis morio-mas*, *foliis maculatis*, C. B. P. *Cynoforchis morio mas*, Ger. Emac. Male Satyrion. It grows in Meadows and Thickets, flowering in May. The Root is used, which is heating and moistening, and of a sweet Taste. Its principal Use is in restoring manly Vigour; it is believed also, to strengthen the Uterus, and dispose to Conception.

Satyrion femina, Offic. *Orchis morio femina*, C. B. P. *Cynoforchis morio femina*, Ger. Emac. Female Satyrion. It is frequently to be met with, as the former, and grows in the same Places, but is later in flowering. These two last Species are of the same Virtues. It is to be observed, that there are a Multitude of Species of *Satyrion*, or *Orchis*, which may indeed, be used promiscuously; yet our Shops have thought fit to make Choice of the last mention'd, or Female *Satyrion*, before the rest.

Satyrion vel Orchis, Offic. *Orchis frateumatica*, Ger. Emac. The French Satyrion. It grows in hilly Places, flowering in June. The Root is used, which agrees in Virtues with the two former; as does likewise the Roots of all the following Species, as,

Satyrion, Rivin. Irr. Hex. *Orchis Hermaphrodita*, Ger. Emac. Butterfly, or German Satyrion. It grows in Woods, flowering in May.

Orchis major latifolia altera, Park. Theat. *Cynoforchis*, Offic. Dog-Stones. It grows in grassy Places; about *Brasil*.

Orchis barbata fetida, J. B. *Tragorchis*, Offic. Goats-Stones. This is produc'd in fat Soils, flowering in May and June.

Orchis spiralis alba odorata J. B. *Triorchis*, Offic. Triple Ladies Traces. It grows in dry Pastures, flowering in Autumn.

Satyrion Regium palmata, Chab. *Orchis palmata*, Offic. *Palma Christi mas*, Ger. Emac. Male Satyrion Royal. It grows in moist and marshy Soils, flowering in May.

The *Salop* is also the Root of another Species of *Orchis*, or *Satyrion*; which grows on the Mountains of *Bursia*, near *Constantinople*. See *Serapias*.

Saxifraga alba, Offic. *Saxifraga rotundifolia alba*, C. B. P. White Saxifrage. It grows in sandy Places, flowering in April. It is drying, heating, diuretic, and opening, and is principally used to expel Gravel, and the Stone of the Kidneys, and Bladder. It is said to be good in Obstructions of the *Menses*. *Fuchsius* affirms, that it attenuates the dense gross Lymph, which hinders the ordinary Motion of the Lungs.

Another Species of *Saxifraga*, is the *Umbilicus Veneris alter*, Offic. *Saxifraga sedi folio angustiore serrato*, Tourn. Inst. Small Navel-wort. It grows on the Mountains of Germany, flowering in the Summer. The Herb is used, which agrees in Virtues with the *Semper vivum*.

Saxifraga antiquorum, Offic. *Saxifraga major Italicorum Matthioli*, Park. Theat. *Caryophyllus Saxifragus*, C. B. P. The great Saxifrage of *Matthioli*. It grows on the Top of Mount *Lupo*, flowering in June. The whole Plant is admirably endued, as *Matthioli* says, with the Virtue of breaking and expelling the Stone.

Saxifraga Dioscoridis, Matth. *Saxifraga vera Dioscoridis*, C. B. Matth. The true Saxifrage of *Dioscorides*, according to *Matthioli*. It grows on Rocks and stony Places. The Herb is used, which boiled in Wine, is good in feverish Disorders; it is also serviceable in the Strangury;

cures the Hiccup, breaks the Stone in the Bladder, and provokes Urine.

Scabiosa, Offic. *Scabiosa pratensis hirsuta quæ Officinarum*, C. B. P. Scabious. It grows in Pastures, flowering in June. The Leaves are used. It is alexipharmic and pectoral; and is principally used in Apostems, for the Pleurisy, Quinsy, Coughs, Asthma, the Plague, and fistulous Ulcers. It is externally used for cutaneous Eruptions, as the Itch, and Leprosy. Scabious is bitter, and gives a faint Tincture of red to the blue Paper, which gives us Reason to believe, that it contains a Salt resembling Sal Ammoniac, and joined with a great Quantity of fetid Oil, and Earth; for, by the Chymical Analysis, beside several acid Liquors, a great deal of Sulphur and Earth, and a little urinous Spirit, and volatile concrete Salt, are obtained from it. Scabious is good to promote Expectoration, when the *Bronchia* and Vesicles of the Lungs, are stuffed with a glutinous, and condensed Phlegm. This is a good Remedy in malignant Fevers, Small-Pox, and Measles, after the Use of Antimonial Medicines. *Tabernaemontanus* says, that the Juice of Scabious mix'd with a little Borax and Camphire, takes away the white Spots, that are often seen upon the *Cornea* of the Eye.

Scammonium, Offic. *Scammonia Syriaca*, C. B. P. *Convolvulus Syriacus*, & *Scammonia Syriaca*, Tourn. Inst. Scammony. The Plant affording Scammony bears green Leaves; almost in the Shape of an Heart, or nearly approaching to those of Ivy; its Flowers are white, and of a Bell Figure; which has occasion'd some Authors to rank it among the *Convolvuli*: It creeps upon the Ground, and only rises by the Support of a neighbouring Tree or Wall. 'Tis from the Root of this Plant, which grows plentifully in many Parts of

the *Levant*, particularly about *Aleppo* that the Drug Scammony is extracted. The genuine comes from *Aleppo*; 'tis light, of a grey Colour, brittle, resinous, and grinds to a grey Powder, of a bitter Taste, and of a weak, but disagreeable Scent. That which is heavy, hard, and black, is to be rejected; and with such they often fill the Inside of the Cods, or Lumps, wherein it is brought to us; this usually being what is burnt, or otherwise damaged in the Operation; for the Juice of the Scammony-Plant is not thicken'd by the Heat of the Sun, as has long been imagin'd; but by means of culinary Fire. This concreted Juice is reckon'd one of the surest Purgatives tho', at the same time, one of the strongest; and is therefore never given without a Corrector. Besides the *Aleppo* Scammony, there are two other Sorts commonly sold, that of *Smyrna* and the *Indian*. The *Smyrna* Scammony is black, heavy, soft, and stony, or full of Shells, and other heterogeneous Matters. But the *Indian* is grey, light, and brittle, tho' no other at Bottom, than a Composition of some very strong purgative Powders made up with Rosin; according to the manner of some unfair Dealers in Drugs among us in *England*. But these two Sorts, are rather poisonous than medicinal, as *M. Pomet* has proved by Certificate, in his general History of Drugs. The *Aleppo* Sort is a very strong Cathartic, and causes great Irritation, and even Inflammations in weak Habits. It is given, in Substance, from two to twelve Grains; but ought never to be used, when there is the least Suspicion of Inflammations, in any Part of the *Abdomen*. It is likewise a very ticklish, uncertain Purge; sometimes it has no Effect at all; sometimes it causes fatal Super-purgations; and, which is most remarkable, it sometimes does not operate at all the first Day,

Day, but brings on an insupportable *Tenesmus*, and *Hypercatarrhis* the next. It is very proper to dilute it with some oily, viscid Substance; such as the Yolk of an Egg, or an Emulsion, made with sweet Almonds, and the cold Seeds. Prepared *Scammony*, or *Diagridium*, is a very proper Ingredient in the *Pulvis Cornachini*, which purges, without any of the bad Effects of *Scammony*.

Scandix, Offic. *Scandix semine rostrato vulgaris*, C. B. P. *Pecten Veneris*, J. B. Shepherd's Needle, or Venus's Comb. It grows frequently among Corn, flowering in May and June. The Herb is used. The Decoction drank, is good for the Bladder, Kidneys, and Liver. Some affirm, that the Root, bruised with Mallows, draws out all manner of Splinters, or other Things infix'd in the Body.

Scariola. A Name for the *Cichorium latifolium*, or Endive.

Schoenanthus. Camel's Hay. See *Juncus odoratus*.

Schoenoprasum, Offic. *Porrum sectivum juncifolium*, C. B. P. *Cepa sectilis juncifolia perennis*, Tourn. Inst. Chives, or Chives. It grows in Gardens, and the Leaves are used; which agree in Virtues with the Onion.

Scilla, Offic. *Scilla vulgaris radice rubra*, C. B. P. *Ornithogalum maritimum*, seu *Scilla radice rubra*, Tourn. Inst. *Cepa maris* & *Squilla*, Offic. Germ. Squill, or Sea Onion. It flowers in September, and the Root is used; which is of a bitter and acrid Taste; and is attenuating, opening, discutient, and diuretic; and is principally used in Obstructions of the Liver, Spleen, and biliary Ducts, for a Suppression of the *Menses* and Urine, and for mucilaginous Infarctions of the Lungs, a Dropsy, and a Cough.

Sclarea, *Horminum*, Offic. *Horminum Sclarea dictum*, C. B. P. *Gallitrichum sativum*, J. B. Clary. It grows in

Gardens, flowering in June and July. The Leaves are used. It is heating and drying, absterges and attenuates. If the Juice is drank, it causes Ebriety. The Plant is antihysterical, and useful in difficult Labours, Obstructions of the *Menses*, and a *Fluor Albus*, and is thought to stimulate in a very great Degree to Venery.

Another Species of *Sclarea*, is the *Æthiopis*, or *Æthiopian Clary*.

Scolymus. The Artichoke. See *Cinara*.

Scolymus Theophrasti, Park. Theat. *Scolymus chrysanthemus*, Tourn. Inst. *Carduus chrysanthemus narbonensis*, Ger. Emac. *Spina lutea*, J. B. Golden Thistle. It grows in Italy, and the Root is used, which agrees in Virtues with the *Eryngium*.

Scordium, Offic. C. B. P. *Chamaedrys palustris canescens*, seu *Scordium Officinatum*, Tourn. Inst. Water Germander. It grows in marshy Places, flowering in June. The Herb is used. It is alexipharmic, and sudorific, and is principally used in the Plague, and pestilential Disorders. It is recommended for malignant Fevers, for Obstructions of the Liver and Spleen, for purulent and mucilaginous Infarctions of the Lungs, and for destroying Worms. Externally used, it is good to mundify Wounds and Ulcers, and to mitigate Pains of the Gout. *Scordium* is bitter, aromatic, and gives a faint red to the blue Paper: It contains an oily, volatile Salt, the *Sal Ammoniac* of which it is not entirely disengaged, but wrapped up in a great deal of Sulphur. Fomentations of this Herb, are applied as a Cataplasm, on Parts which are threaten'd with a Gangrene. Among the Antients, it was an Ingredient in all Medicines, against the Poisons of mad Animals. A Conserve is prepared of this Plant, which is sudorific, and good for the *Asthma*, and Shortness of Breath, and for Virgins labouring

bouring under a *Chlorosis*, and Obstruction of the *Menses*; the Leaves infused in Wine, are serviceable in Dropsies.

Scorodonia, *Salvia sylvestris*, Offic. *Scorodonia* five *Scordium alterum quibusdam*, & *Salvia agrestis*, Park. Theat. *Scordium alterum* five *Salvia agrestis*, C. B. P. Wood Sage. It grows in Woods and Thickets flowering in June. The Herb is used, principally as a Vulnerary, and to provoke Urine and the *Menses*, and is believ'd by some, to cure the *Lues Venerea*. The bruised Leaves, with Vinegar, Litharge, and Salt, cure a Gangrene and Cancer. Its Leaves are very bitter and aromatic; they have a little Taste of Garlic, and give hardly any Tincture of red to the blue Paper, which gives us Reason to believe, they contain a Salt, like that of *Germander*; but loaded with more essential Oil, and in which the *Sal Ammoniac* discovers itself but little. *Tragus* commends its Juice, for the Jaundice, and a Tertian Ague. A Glass full of the Infusion of this Plant in Wine, is very successfully used at *Paris*, for the Dropsy.

Scorodoprassum. Wild Leeks. See *Allium*.

Scorpius. Furz, or Gors. See *Genista*.

Scorzonera nostra & *Hispanica*, *Viperaria*, Offic. *Scorzonera latifolia sinuata*, C. B. P. *Tragopogon Hispanicus* five *Escorzonera*, aut *Scorzoneræ*, J. B. Vipers Grass. It is cultivated in Gardens, flowering in June. The Root is used. This Plant is said to take its Name from its Effect on the Viper, which if but touched with the Juice of this Plant, immediately droops and sickens; and it is said, that a Person may take a Viper in his bare Hand, without receiving any Harm, if he first rubs his Hand with this Herb; for the Viper will not be able to bite, but faints and sickens. The Juice is very service-

able in inflammatory Diseases; three Ounces thereof, being taken in the Morning, fasting, are recommended against all volatile Poisons; and the Herb applied, cures envenom'd Wounds. It is a proper Herb in all Diseases, proceeding from too great a Mobility of the Humours, and which require Agglutinants and Demulcents; also, in all Disorders, arising from a putrid Blood; such as the Small Pox, Measles, Pestilence, burning Fevers, Peripneumony, and Pleurisy. The Root is an excellent Cleanser, and Corrective; for which Reasons, it is of extraordinary Use in hypochondriac Disorders, being boiled in Barley-Water. It is of good Service in Melancholy, and Pains of the Gout, and some use it with Success, in an immoderate Flux of the *Menses*. There is no Plant more commended than this, in a *Phthisis*, Extenuations, and the Jaundice.

Scorzonera subcærulea, Offic. *Scorzonera angustifolia subcærulea*, C. B. P. *Viperina angustifolia, elatior*, Ger. Emac. Hungarian Vipers Grass. It grows in hilly Places, and the Root is used, which agrees in Virtues with the former, and may supply its Room.

Scrophularia, Offic. *Scrophularia nodosa fætida*, C. B. P. Fig-Wort. It grows in Hedges, flowering in July. The Root and the Herb are used. Its Leaves are very bitter, and stinking, even more than those of Elder, and give but a very faint Tincture of red to the blue Paper; the Root gives it a deeper, which makes us conjecture, that the *Sal Ammoniac*, which is naturally in the Salt of the Earth, predominates in this Plant, where it is united with a great deal of fetid Oil. By the Chymical Analysis, we obtain from this Plant, a great deal of volatile, concreted Salt and Oil. The *Scrophularia* is of an acrid and aperient Quality, accom-

panied

panied with a copious *Mucus*; whence it is an effectual Lenitive, in all Pains proceeding from a peccant Acrimony, mitigating the same, as well as dissipating any gross Matter. A Cataplasim thereof is of universal Esteem, for discussing, resolving, and maturing, though the Humour be of considerable Hardness. The Powder, sprinkled on watry Ulcers, closes, and conglutinates them; and is proper in a Dilatation of the Hæmorrhoids. The distill'd Water of this Plant, is good for Pimples and Redness of the Face. An Ointment is prepared of this Plant, which is excellent for the Gout, Piles, and Tetters.

Scrophularia aquatica major, C. B. P. *Betonica aquatica*, Offic. *Scrophularia maxima radice fibrosa*, J. B. Water Betony. It grows in watry Places, flowering in June. The Herb is used, which agrees in Virtues with the former. It is of great Service in correcting Senna.

Scutellaria, Offic. *Scutellaria palustris repens cærulea*, Hist. Oxon. *Cassida palustris vulgatiores flore cæruleo*, Tourn. Inst. *Tertianaria alitis* *Lyfimachia galericulata*, J. B. Hooded Willow Herb. It grows in Marshes, flowering in July or August. The Herb is used. It takes its Name, *Tertianaria*, from its curing Intermitting Fevers. A Decoction of it is recommended by some, for the Quinsey.

Sebesten, Offic. *Sebestina domestica*, C. B. P. *Myxa domestica*, J. B. *Prunus Malabarica fructu racemoso, calyce excepto*, Raii Hist. The Sebesten. This Plant is produced in Egypt and Asia, and flowers in the Spring. Its Fruit, which is the Part used, is ripe in the Autumn, resembles a common Prune, is of a blackish Colour, and under a carnos, sweet, and honeyish Pulp, includes a Kernel. *Sebestens* are in an intermediate Degree

between hot and cold: They, moisten, soften, and obtund the Acrimony of the Humours. They are principally us'd in acrid Catarrhs, and Acrimony of Urine, bilious Fevers, and Obstructions of the Belly. In a Word, as in Figure, so in Virtues, they resemble Damsons.

Secale, Offic. *Secale hybernium vel majus*, C. B. P. Rie. It is sown in Fields. The Seeds of Rie yield a Meal, with a proper Bran belonging to it, of which Bread is made, which is of excellent Service in Cataplasms, for discussing Tumors and Pains. The Crust of it toasted, cleanses the Teeth. The Bread is less nourishing, and not so soon digested as that of Wheat; but it is very loosening, and good for those who are costive. The Bran is deterfive and emollient, and of Service in a Diarrhæa, and an inveterate Cough.

Securidaca, Offic. *Securidaca lutea major*, C. B. P. *Hedysarum majus*, Ger. Emac. Hatchet Vetch. It grows among Corn, in hot Countries, but is cultivated with us in Gardens; and taken inwardly, is good for the Stomach, and is an Ingredient in Antidotes.

Sedum majus, *Sempervivum majus*, Offic. *Sedum majus vulgare*, C. B. P. House-Leek. It grows upon old Houses, flowering in June. The Herb is used, which is refrigerating, and strongly astringent, and is principally used in bilious Fevers, to allay Thirst and Heat. This Plant being analysed, yields a good deal of Acid and Earth, and a very little concrete, volatile Salt. It probably contains a Salt resembling Alum, mixed with a little *Sal Ammoniac*; for the Juice of this Plant, evaporated to one half, emits an urinous Smell. The distill'd Water of House-Leek, is good for the Quinsey. The Juice is used in Injections in the *Procidencia Uteri*, and sinuous Ulcers.

The Leaves are applied to Corns, and the Knots of the Gout. A Pint of the Juice of this Plant is an excellent Remedy for founder'd Horses. The Leaves stripped of their outer Membrane, and macerated in Water, are commended in burning Fevers, Inflammations, Gangrenes, and Suppurations of the Stomach, and Intestines, and for *Aphthæ*. The *Africans* give ten Ounces of the new expressed Juice in a Dysentery; and with the same, cure not only this Disease, but all pestilential, and spotted Fevers. It is also, a very good Plant, for correcting the Malignity of the worst Kind of Ulcers.

Sedum minus, Offic. *Sedum minus terebinthifolium album*, C. B. P. *Vermicularis flore albo*, Park. Theat. Small House-leek. It grows upon Walls and old Buildings, flowering in June. The Herb is used, which agrees in Virtues with the preceding.

Another Species of *Sedum*, is the *Illecebra*, Offic. *Sempervivum minus vermiculatum acre*, C. B. P. *Sedum parvum acre flore luteo*, J. B. Wall Pepper. It grows on Walls and old Buildings, flowering in July. The Herb is used. It dissolves Struma's, and is a very acrid and hot Plant. The Juice, taken with some proper Liquor, excites Vomiting, and powerfully brings away pituitous and bilious Humours; whence it is of great Use in Quartans. It is also esteem'd a good Antiscorbutic. Externally applied, it makes the Skin red, excites Blisters, and exulcerates.

Sedum Cepæa dictum, Tourn. Inst. *Cepæa*, Offic. C. B. P. Base Orpine. It is sown in Gardens, flowering in the Summer. The Herb is used. The Leaves, exhibited in Wine, cure the Strangury, and the Scabies of the Bladder.

Selinum segetale, Offic. *Selinum Sii foliis*, Ger. Emac. *Sium arvense*, *fve segetale*, Tourn. Inst. Hone-Wort. It grows among Corn, flow-

ering in the Summer. The Herb is used, which is greatly recommended for Tumors.

Sempervivum. See *Sedum*.

Semen. A Seed. The four greater hot Seeds, are those of *Anise*, *Caraway*, *Cumin*, and *Fennel*.

The four smaller hot Seeds, are those of *Bishops-Weed*, *Amomum*, *Aspium*, and *Daucus*.

The four greater cold Seeds, are those of the *Citrus*, *Cucumber*, *Gourd*, and *Melon*.

The four lesser cold Seeds, are *Succory*, *Endive*, *Lettuce*, and *Purslane*. For the Virtues of all these Seeds, see them under their respective Articles.

Senecio. Groundsel, or Simson. See *Erigerum*.

Senecio Asiaticus, *Jacobææ folio*, *radice lignosa*, *China Officinarum dicta nobis*, Boerh. Ind. Alt. *Pseudo China*, *China supposita*, Offic. *Parin Chakka*, Act. Philosoph. Lond. Bastard China. It grows in Malabar. This is the Plant, which some Years ago, was sent to the English East-India Company at London, under the Name of *Parin Chakka Malabarica*, by Samuel Brown. Mr. Ingram of Newcastle, was cured by it of a Hectic Fever, under which he had laboured many Years, as we are inform'd by Dr. Dillenius, in his *Hortus Elthamensis*, and who also says, that it is called *China Root* in *Madraspatan*, and that it is two Feet in Height, and has a Root like that of *China*. Some Specimens of this Plant were presented by the Company, to the Royal Society at London, and publish'd in the Philosophical Transactions, for the Year 1702, No. 274, with Observations. A few Years after, the famous G. Commelin, M. D. was presented with the same Plant, and published a Description of it, in *Hort. Medic. Amstelod.* under the Name of *Senecio Asiaticus*, *Jacobææ folio*, *radice lignosa*, *China Offic. dicta*, the

“ Se-

"*Senecio* of *Asia*, with a Leaf like that of the *Jacobæa*, and a woody Root, called the *China* of the Shops," with the following Note; "I had the Knowledge of this Plant, from that skilful Surgeon *Andreae Hammel*, who brought it with him from the *East-Indies*, into his own Country." This gave Occasion to the Authors of the *Catalogus-Simplicium*, in the *Pharmacop. Londin.* and the *Indices Medicamentorum* in the *Pharmacop. Paris.* to commit a Mistake, in improperly setting down this *China* of the Shops for the Root of the Plant. *Boerhaave*, in his *Historia Plantarum*, informs us, that the famous Botanist *Switsen*, sent him a Figure, with a Description of the *Japonesè China*; but this is quite another Plant from what we are speaking of. Its Root indeed, is very thick, as in the other; but then it is also tuberos, which is otherwise in the *Senecio*, and is a scandent Plant, like the *Clematitis* of *Canada*, or Ivy, or Briony, which last it most resembles; and he imagines, that our *Senecio* is not so penetrating, as to cure the Leprosy; for it is better qualified for an Emollient, than an Expeller. But the *Japonesè* is far more acrimonious; so as perhaps to be sufficient for the Cure of the *Lues Venerea*, as it is said of the Root of *China*; tho' I never as yet, says he, saw any such Effect performed by it. This Root is very dear, and for that Reason, very often adulterated; for when it is corroded, and exhausted with Age, they fill up the Perforations, and sell it for good and sound; and therefore he never prescribed it before Examination; for there is no trusting to it unseen.

Senna Alexandrina, Offic. *Senna Alexandrina sive foliis acutis*, C. B. P. *Sena Orientalis*, J. B. Alexandrian *Sena*. It is cultivated in *Syria*, *Persia*, *Arabia*, and *Egypt*. The Leaf of this *Sena* is of a pretty

strong Consistence, and shaped like the Point of a Spear. This is the best Sort of *Sena*. It purges Phlegm in a particular Manner; but as it is subject to gripe, it ought to be given with Caution, to those who have weak Viscera, or are of an inflammatory Habit of Body. It is usually mixed with Carminatives, such as Coriander Seeds, Cinnamon, &c. or more effectually with Alcaline Salts. It ought to be well cleansed from its Stalks; and then the Dose in Substance, is from a Scruple to a Dram; and in Infusion, from two Drams to half an Ounce. Some have endeavour'd to correct *Senna* with the *Scrophularia aquatica major*; but that is now left off; common Tea having the same Effect. Some Physicians order *Sena*, by the Name of *Folia Orientalia*. The Follicules, or Fruit of the *Sena* Tree, purge in a less Degree than the Leaves. The common Dose is from three to six Drams in Infusion, or Decoction.

Senna Italica, Park. Theat. *Senna Italica, foliis obtusis*, C. B. P. *Sena Florentina*, J. B. Italian *Sena*. This is distinguish'd from the former, by the Largeness and Roundness of its Leaves. This Leaf is also much thinner, and more brittle than the other. It is a very weak Cathartic, but it gripes violently, and therefore is seldom used.

Serapias, Offic. *Serapias sive Salep*, Marl. Obs. *Orchis femina procerior majore flore*, Tourn. Herbar. *Salep*. This is the Root of a Kind of *Orchis* or *Satyrion*, which grows on the Mountains of *Bursia*, near *Constantinople*. The *Turks* pretend, that it is very effectual in restoring decay'd Strength, and exciting to Venery. It is also, said to prevent Abortion, and is used both in Substance, and in Infusion. The Taste of the Root resembles that of Gum Tragacanth, but has no Smell. The *Turks* and *Persians* prepare a Drink of this

Root, mix'd with Milk and Ginger, which they also call *Salop*, which they drink hot, and esteem an excellent Remedy against Venereal Disorders. *Salop*, either in the Root, or in Powder, is commonly sold at the Druggists; the Way of using it is, to dissolve a Tea-spoonful of it in cold Water, by stirring it; and then to heat it, or let it just boil; and half a Pint of this Liquor, or more, makes an excellent Restorative Liquor, taken as a Breakfast, or otherwise, with Sugar, and with or without the Juice of Lemon.

Serpentaria Virginiana, Offic. *Serpentaria Virginiana Contrayerva Virginiana*, *Viperina*, Mont. Exot. Med. *Radix Snagrol nothæ Creticus*, (Snake Root, *Novæ Angliæ*) Corn. 214. Virginian Snake Weed. It grows in *Virginia*, the Roots are used, which are alexipharmic. They cure the Bite of a mad Dog, and defend them from the *Hydrophobia*, and are a certain, and immediate Remedy for the venomous Bite of the Rattle-Snake. It is given as a Diaphoretic in the Small Pox, Measles, and to kill Worms. It is, also emmenagogue and diuretic. The Dose is from ten Grains to a Dram.

There is another Species of the Snake Root, called the *Senekka Rattle-Snake Root*, which is said to cure effectually the Bite of a Rattle-Snake, if taken immediately after it. The Bite of this Snake is sudden Death, for the most part; that is, Death follows often in fifteen Minutes, sometimes sooner; and at other Times the Patient may live some Days. The Reasons of these Differences, in the Time of Death, are various, such as the Season of the Year, Constitution of the Patient, and Part bit. Those that travel or hunt in the Woods, carry this Root powder'd, in their Shot Bags, to chew and swallow as soon as they are bit by the Snake, the Stagnation of

the Blood being prevented by its peculiar Activity. A Nation of the Northern *Indians*, called *Senekkas*, were the Discoverers of the Efficacy of the Root of this Plant; they observing, that the Root and Flowers resembled the Rattle of the Snake, concluded that Providence had impressed that Characteristic, to point out its Use. From that *Indian* Nation, this Root is named *Senekka Rattle Snake Root*, to distinguish it from the others called *Rattle Snake Root*; which are much inferior in Efficacy. These *Indians* returning from a War with a Southern Nation, called *Catawbaes*, in the Year 1712, communicated the Efficacy of this Root to *William Caniko*, a Planter, in the Frontiers of *Virginia*, which he imparted to the Country about him; and so it was soon known throughout *America*. The Root of this *Senekka Rattle Snake Weed* has since been us'd, as is said, with Success, in the Epidemical Fevers of *Virginia*; in Pleurisies, Peripneumonies, Gout, and Rheumatisms, either in Decoction, Infusion, or Substance; and in these it should seem to be a good Medicine, if the Accounts we have of it could be depended on.

Serpentaria nigra. Black Snake-weed. A Name for the *Asarum Virginianum*.

Serpyllum, Offic. *Serpyllum vulgare minus*, C. B. P. *Serpyllus vel Serpyllum*. Mother of Thyme. It grows in dry Pastures, flowering in June and July. The Herb is used, which agrees in Virtues with the *Thymus*, or Thyme. It provokes Urine, and the Menfes. It is a little bitter, acrid, styptic, odoriferous, and stains the blue Paper, with a pretty deep Red. It is likely that it abounds with an aromatic, and oily volatile Salt; but this Salt retains still a Part of the Acid of the *Sal Ammoniac* of the Earth; whereas in the aromatic, oily, artificial, volatile Salt, the acid Part of the *Sal Ammoniac* has been stopt by the
Salt

Salt of Tartar, or by the Ashes. Thus the Mother of Thyme is Cephalic, Stomachic, and good for the Vapours. It destroys the explosive Matter, which causes convulsive Motions; it restores the spirituous Parts of the Blood, and re-establishes the Functions of the *Primæ Viæ*. The Spirit of Mother of Thyme, and its distilled Water, are very good for soporific Disorders, and the Vapours. The essential Oil is commended for the Epilepsy. The Conserve of the Flowers and the Leaves of this Plant, relieve those that are troubled with the Falling Sickness.

Serpyllum citratum, Offic. *Serpyllum foliis Citri odore*, C. B. P. *Serpyllum Citri odore*, J. B. Lemon Thyme. It grows in hilly Places, flowering in August. The Herb is used, which agrees in Virtues with the former.

Serpyllum verum, Offic. *Serpyllum vulgare majus*, C. B. P. Great Mother of Thyme. It is cultivated in Gardens, flowering in the Summer. The Herb is used, which provokes the *Menses* and Urine, and is good for the Gripes, Ruptures, Lacerations, and Inflammations of the Liver; eases Pains of the Head, and is particularly serviceable in Phrenesies and Lethargies; stops Vomitings of Blood, and is good for the Bites of Serpents.

Serratula, Offic. C. B. P. *Serratula purpurea*, Ger. Emac. *Jacca Nemorensis*, quæ *Serratula vulgo*, Tourn. Inst. Saw-Wort. It grows in Woods and Meadows, flowering in July; it is esteemed vulnerary, and is said to mundify Ulcers, and promote the Generation of Flesh therein; to mitigate the Pains of the *Hæmorrhoids*, and to cure an intestinal Rupture. The Herb and Root are recommended in Case of Bruises in Falls from Eminences.

Sesamoides parvum, Offic. *Chondrilla Sesamoides dicta*, Park. Cata-

nance *quorundam*, Tourn. Inst. Bastard Succory. It grows in dry Places in hot Countries, flowering in June. The Herb is used; it purges Bile and Phlegm by Stool; apply'd by Way of Cataplasm, with Water it dissolves Tubercles, and œdematous Swellings.

Sesamum, Offic. *Digitalis orientalis Sesam dicta*, Tourn. Inst. *Sesamum congentibus Gangya*, *Lusitanis Girgilim*, Marcg. *Gangila sive Sesamum Africanum*, Pison. *Schit-Elu*, Hort. mal. *Tala*, Herm. Mus. Zeyl. Oily purging Grain. The Seeds are used, which are heating, moderately moistening, emollient, and paretic, and are of a viscid, pinguious, and consequently of an emplastick Quality; they discuss a Hardness of the Nerves, being rubbed therewith, and cure the Pain of the Colic.

Seseli Æthiopicum, Offic. *Seseli Æthiopicum Salicis folio*, C. B. P. *Bupleurum arboreseens Salicis folio*, Tourn. Inst. Shrub Hartwort. This is found in the Gardens of the Curious, flowering in August. The Seed is much more acrimonious and scented than that of the *Seseli Massiliense*, whence it is supposed to have some extraordinary Virtues.

Seseli Creticum, Offic. *Seseli Creticum minus*, C. B. P. *Tordylium Narbonense minus*, Tourn. Inst. *Caucalis minor pulchro semine sive Bellonii*, J. B. Hartwort of Candy. It is cultivated in Botanic Gardens, and the Seed is used, which is nephritic, uterine, and pulmonic. Its principal Uses are in the Strangury, and Stoppage of Urine; it removes Pain, provokes the *Menses*, and promotes Expectoration in Catarrhs.

Seseli Massiliense, Offic. *Seseli Massiliense Ferule folio*, C. B. P. *Libanotis Massiliensis Ferule folio*, Hist. Oxon. Italian Hartwort. The Part used is the Seed, which is of principal Service in Diseases of the Head, the Epilepsy, Weakness of Sight,

Sight, Convulsions, and the like, and in Affections of the Breast and Lungs, Coughs, Catarrhs; also in Obstructions of the Liver, Dropsy, Crudities of the Stomach, in the Stone of the Kidneys and Bladder, and in a Stoppage of the *Menses*. It is a specific Remedy against the *Cicuta*.

Seseli Peloponnense. Great broad-leav'd Hemlock. A Name for the *Cicuta latifolia*.

Seseli vulgaris & *Siler montanum*, Offic. *Seseli* sive *Siler montanum vulgare*, J. B. *Ligusticum quod Seseli Officinarium*, C. B. P. Common Hartwort. It is cultivated in Botanic Gardens, flowering in *June*. It is heating and drying, provokes Urine and the *Menses*, and discusses Flatulencies.

Sideritis, Offic. *Sideritis hirsuta procumbens*, C. B. P. *Sideritis Judaica Lobelii*, Ger. Emac. Iron-wort. It grows in stony Places in *Italy*, flowering in the Summer. The Herb is used. An Application of the Leaves cures Wounds, without any Danger of Inflammation.

Sideritis, Offic. *Sideritis vulgaris hirsuta crecta*, C. B. P. Common Iron-wort. It grows common in *Germany*, *Italy*, and *France*, flowering in *June*. The Herb is used, which is said to be good for Wounds and Ruptures, and to be so drying as to cure a *Fluor albus*. This Species is esteemed by some only as a Variety of the former.

Sideritis Monspeulana, J. B. German Iron-wort. It grows in Meadows, flowering in *June* and *July*. The Herb is greatly used in the German Shops, and is said to agree in Virtues with the former.

Sideritis glabra arvensis, J. B. Iron-wort with smooth Leaves. It grows among Corn; the Herb is used, which agrees in Virtues with the other Species.

Sigillum Solomonis, Solomon's Seal. See *Polygonatum*.

Siler montanum, Common Hartwort. See *Seseli vulgaris*.

Siliquea dulcis, *Caroba*, *Carantia*, Offic. *Siliquea edulis*, C. B. P. *Ceratia*, *Siliquea sive Ceratonia*, the Carob Tree. It grows in *Sicily*, and the Kingdom of *Naples*; the Fruit is used, which is drying and astringent, and is principally used in hot Disorders of the Stomach, and in Coughs.

Siliquea sylvestris, C. B. P. *Acalis*, Offic. The wild Carob. It grows at *Constantinople*; the Seeds are used, which are greatly recommended at *Constantinople* for Disorders of the Eyes.

Siliqueastrum, Tourn. Inst. *Arbor Judæ*, Ger. Emac. *Judaica Arbor*, J. B. *Siliquea sylvestris rotundifolia*, C. B. P. *Judas's Tree*. It is cultivated in Gardens, flowering in the Summer; the Pod of this Plant is esteem'd astringent.

Sima Rubo, Geoff. Tract. *Radix Simarouba*, Offic. This is the Root of a *West India* Plant, which produces the *Cayan Wood*, remarkable for being very light: the Root and Bark are said to be excellent Astringents, proper in all Sorts of Loosenesses, and especially in Dysenteries. The Dose of the Root is an Ounce, cut in small Pieces; and of the Bark two Ounces, boil'd in three Pints of Water to a Pint. This Decoction the Patient uses for his common Drink till he is cured.

Sinapi, Offic. *Sinapi rapæ folio*, C. B. P. *Eruca rapæ folia*, Rup. Flor. Gen. Common Mustard. It grows in Gardens, and in Ditches; the Seed is used; it heats and dries, incides, attenuates, and attracts. Its principal Uses are to excite an Appetite, promote Chylification, and purge the Head. Outwardly it is used to stimulate, being put in the Nostrils, or applied to other Parts. It breaks mature Tumors, and excites Sneezing. Mustard Seed, by

by the Chymical Analysis, gives a much greater Indication of an acrid than an acid Salt; but it affords a considerable Quantity of Oil, very little fixed Salt simply saline, a great deal of Earth, a little urinous Spirit, and no volatile Salt. As to the internal Use of Mustard, it is proper where an inert, aqueous, or phlegmatic Humour is predominant. A Girl at *Amsterdam* labouring under Convulsions, after she had tried all Manner of Medicines in vain, was at last, by the Advice of Mr. *Ruyfch*, cured by the Use of crude Mustard bruised with Wine. The Seeds are also of Service, whether internally or externally used, in hypochondriac Disorders, Inflations of the Stomach, Obstructions of the Spleen, and other Diseases proceeding from an Acid, of which Nature are the Scurvy, Cachexy, Chlorosis, and soporous Affections; they also stimulate to Venery, and provoke Urine. The expressed Oil is externally applied in the Palsy and cold Diseases; the Seeds are also applied in a quartan, and sometimes in a quotidian Fever. Some make a Cataplasim with Turpentine, Pidgeon's Dung and Mustard, and apply it to the Parts affected with the Gout, and even to the Jaw in a violent Tooth-ach. Mustard and other acrid Vegetables, prove excellent Medicines, when prudently given in Distempers attended with an indolent, watery, or cold phlegmatic Habit, no way saline, where acid Humours are lodged in the first Passages; where the Bile is sluggish, and where no alkaline, fetid or oily Matter is lodged; but the Body remains cold, torpid, and swelled all over; as, on the other Hand, they prove hurtful, where the Body is hot and feverish, the Bile sharp, the Juices putrid, the Parts inflamed or wasted, or where the putrid Scurvy abounds. Oil of Mustard by Expression, is prescribed

with Success in the severest Fits of the Stone; but this Oil by Expression, is more mild, and by no means like Oil of Mustard Seed which is procured by Distillation, and is extremely acrid and igneous.

Sinapi album, Offic. *Sinapi Apii folia*, C. B. P. White Mustard. It grows in Fields and by the Sides of Ditches. The Seeds are used, which agree in Virtues with the former.

Sisarum, Ger. Emac. *Sifer*, Offic. *Sifer*, *Sisar*, *Sisarum*, Chab. *Sisarum Germanorum*, C. B. P. Skirret. It is cultivated in Gardens, flowering in June; the Root is used, which is rather of culinary than officinal Use, and is of a bitterish and somewhat astringent Taste. It is good for the Stomach, excites an Appetite, is diuretic and lithontriptic, affords good Nourishment, is easy of Digestion, and esteem'd a specific Antidote against Quicksilver. It is very proper for those who spit Blood, or make bloody Urine, if they confine themselves to eat no other Food but this, boiled in Milk, Whey, or Flesh Broth; for by such Means they would procure a due Laxness of the Belly, and a Removal of the Disorder. It is recommended also for the Strangury and *Tenesmus*; and is esteem'd a very good Remedy against a Dysentery, and Fluxes of the Belly. The Root boil'd as aforesaid, then bruis'd and taken in the Morning before the Patient rises, is very good in a *Pbthisis*, or great Extenuation of the Body; as it is also in all pectoral Disorders.

Sisarum Germanicum, C. B. P. *Secacul*, Offic. *Pastinaca Syriaca* & *Secacul Arabum quibusdam*, J. B. Syrian Skirret. It grows about *Aleppo* in Syria; the Root is used, which agrees in Virtues with the former.

Sisymbrium aquaticum, Water-Cressles. See *Nasturtium aquaticum*.

Syſſyrhinchium, Offic. *Sifyrrhinchium minus anguſtifolium*, C. B. P. *Crocus Italicus parvo flore, radice roſtrata*, Elem. Bot. *Bulbocodium Crocifolium flore parvo violaceo*, Boerh. Ind. Alt. Spaniſh Nut. It grows in the Kingdom of *Valencia* and *Murcia* in *Spain*, and flowers in *March*. The Root is ſaid, by the Inhabitants where it is a Native, to be good for the Gripes; but the Body muſt be exerciſed by Dancing after taking it.

Sium, Offic. *Sium latifolium*, C. B. P. *Sium Dioſcoridis ſive Paſtinaca aquatica major*, Park. Theat. Water Pariſnep. It grows in Rivers and marſhy Places, flowering in *July*. The Leaves eaten either crude, or boil'd, are ſaid to break and expel the Stone, to excite Urine and the Menſes; to promote the Expulſion of the Fœtus, and to be good in a Dyſentery.

Sium umbelliferum, J. B. *Berula*, Offic. *Sium ſive Apium paluſtre, foliis oblongis*, C. B. P. Upright Water Pariſnep. It grows in watery Places, flowering in *June*. The Leaves are uſed; it is eſteem'd an Antifcorbutic, and agrees in Virtues with the former.

Smilax arborea. This is already ſpecify'd under the Article *Ilex*.

Smilax aspera, Offic. *Smilax aspera fructu rubente*, C. B. P. Rough Bindweed. This Plant is cultivated in Gardens, flowering in the Summer. The Leaves, Tendrils, Root, and Berries are uſed in Medicine, which are ſaid to evacuate noxious Humours by Sweat and Tranſpiration; to cure Diſorders of the Skin; to expel Poiſon, and eaſe Pains of the Joints. It is a *Succedaneum* for *Sarſaparilla*, and is celebrated for curing venereal Diſorders, taken either in Decoction or Powder.

Smilax bortenſis. Kidney Beans. See *Phaſiolus vulgaris*.

Smilax lævis, Offic. *Convolvulus*

lus major albus, C. B. P. *Scammonium Germanicum*, Hoffm. Cat. Altdorff. Great Bindweed. It grows about Hedges, and in Gardens, flowering in the Summer. The Root, the Herb, and the Water diſtill'd from it, are kept in the Shops at Hall in Germany. This Plant has the Reputation of purging off bilious, acrid, and ſerous Humours. The Root is Cathartic; whence it is call'd, by Hoffman, German Scammony. The Women uſe a Decoction of this Plant as a Preſervative againſt Miſcarriages, with an Intent to allay wandering Pains, and to prevent any ſudden Frights from affecting them. *Prevotius*, in his *Medicina Pauperum*, recommends a Decoction of this Plant, as a mild Evacuant of Bile.

Smyrniū & Hippoſelinum, Offic. *Hippoſelinum Theophraſti, vel Smyrniū Dioſcoridis*, C. B. P. *Macerone*, Chab. Alexanders. It grows upon Rocks by the Sea Side, flowering in *June*. The Leaves are uſed; it is aperient, diuretic, and ſudorific; excites the menſtrual Diſcharge, and promotes a difficult Birth; it is good for the Colic, Aſthma, and Iſchiadic Pains.

Solanum, Offic. C. B. P. *Solanum vulgare*, Park. Theat. *Nilentſunda*, Hort. Mal. *Aguara-quiya*. Piſon Nightshade. It grows by Way Sides, flowering in *Auguſt*; the Herb and Seeds are uſed. The Leaves give but a faint Tincture of Red to the blue Paper, but the ripe Fruit gives it a very deep one, which gives us Reaſon to conjecture, that the *Sal Ammoniac* in this Plant, is temper'd in the Leaves by a conſiderable Quantity of Oil and Earth; but that the acid Part of this Salt is very much diſengag'd in the ripe Fruit; ſo that we muſt make Choice of the Parts of this Plant, as different Occaſions may require. The Berries, for Example, are more cooling, but

yet more repellent than the Leaves, which lenify by resolving, cleansing, and absorbing. By the chymical *Analysis* they yield a great deal of volatile concrete Salt. The Juice of this Plant is very penetrating, saponaceous, and detergent, whence it is proper in Wounds where Blood is extravasated and grumous. It is, also, diuretic, expelling Gravel from the Kidneys; and sudorific, for which Reason Physicians advise a strong Decoction of the tender Branches to be drank in a *Phthisis*, where Attenuants and Cleansers are required; but where there is an excessive Thinness of Blood, which manifests itself by natural Sweats, it is prejudicial. It is a very serviceable Plant in Inflammations, and too great a Tenseness of the Fibres, and the bruised Leaves are good in the Hemorrhoids: The Juice is very good in a Cancer, to wash the same; and with rectify'd Spirit of Wine, is proper in an Erysipelas, and all cutaneous Diseases. It has the Virtues of Liquorice, and the Decoction of it is highly serviceable in all Disorders from Obstructions, for it is deterfivè and aperient, and is commended in all Distempers of the Breast, Ulcers, external or internal, the Scurvy and *Lues Venerea*. It is very diuretic, and no Plant is more proper for a Camp, where the Soldiers have receiv'd any internal or external Hurt. Outwardly it is used in the Gout to ease the Pains. Physicians highly extol the outward Use of this Plant, and, I think, with good Reason; they take the bruised Leaves, and expressing the Juice, mix it with Ointment of Roses, and apply it to the Head in a Phrensy, as a Refrigerant and Anodyne, whence the Juice is said to be an Antiphlogistic. The Leaves bruised with Salt, or Nitre, are proper in Inflammations, Gangrenes, and Suppurations. The Plant taken inwardly, is said to mi-

tigate unnatural Heat, to refrigerate, and comfort the internal Parts. But as many Children in the Country are seiz'd with Convulsions, and destroy'd by the Use of it, which also proves mortal to Poultry, as we are assur'd by the Peasants, this Plant is to be suspected as well as its Berries. The Leaves bruised are fit to be externally applied in Inflammations of the Hemorrhoids.

Solanum arborescens, Chab. *Amomum Plinii*, Offic. *Solanum fruticosum bacciferum*, C. B. P. Tree Nightshade. It grows spontaneously in *Madeira*, flowering in *July* and *August*. The Fruit is used. It agrees in Virtues with the former.

Solanum lethale. Deadly Nightshade. See *Belladonna*.

Solanum lignosum, *Dulcamara*, Offic. *Solanum scandens*, seu *Dulcamara*, C. B. P. *Amara dulcis*, Ger. Emac. *Glycyphoros* sive *Amara dulcis*, J. B. Bitter-Sweet. It grows in watry Places, flowering in *June*. The Root is used; it provokes Urine, and is good for the Dropsy.

Solanum somniferum, Offic. *Solanum somniferum verticillatum*, C. B. P. *Alkekengi fructu parvo verticillato*, Tourn. Int. *Pewetti*, Hort. Mal. Sleepy Nightshade. It grows in Botanic Gardens, flowering in *July*. The Root and Fruit are used. The Root has a somniferous Quality, but milder than *Opium*. The Fruit powerfully provokes Urine, and therefore is prescribed in Hydropic Cases. Its Decoction easeth the Tooth-ach. The Juice of the Root with Honey cures Dimness of Sight.

Solanum tuberosum. *Virginia*, commonly called *Irish* Potatoes. See *Battata Virginiana*.

Solanum vesicarium. Winter Cherry. See *Alkekengi*.

Soldanella. Scottish Scurvy Grass. See *Brassica marina*.

Soldanella alpina, Ger. *Soldanella alpina rotundifolia*, C. B. P. Mountain Bindweed. It grows on the Alps, flowering in July. The Herb is used, which is reckon'd among Vulneraries.

Solidago. Saracen's Confound. This is already specify'd under the Article *Doria*.

Sonchus asper, Offic. *Sonchus asper laciniatus folio Dentis Leonis*, Tourn. Inst. Prickly Sow Thistle. It grows in Gardens, and upon Banks, flowering in June. The Leaves are used, which are sometimes in Winter employ'd in Sallad, and are esteem'd good for Difficulty of Breathing, an Asthma, and the Strangury. This Plant is refrigerating, and for that Reason a very proper Application to any Part inflam'd.

Sonchus laevis, Offic. *Sonchus laciniatus, non spinosus*, J. B. Smooth Sow Thistle. It grows upon Banks and in Gardens, flowering in May. The Leaves are used; it agrees in Virtues with the former.

Another Species of *Sonchus* is the *Hieracium*, Offic. *Sonchus repens, multis Hieracium majus*, J. B. *Hieracium majus Dioscoridis*, Ger. E-mac. The greater Hawkweed. It grows in Fields, flowering in July. The Leaves are said to be cooling and moderately astringent, and to be good in Inflammations. The Herb, together with the Root, is said to be a good Topic for the Sting of a Scorpion.

Sophia Chirurgorum, Offic. *Nasturtium sylvestre tenuissimè divisum*, C. B. P. *Seriphium Germanicum sive Sophia quibusdam*, J. B. Flix Weed. It grows amongst Rubbish, flowering in June. The Herb is used; it is drying and astringent, and stops Diarrhæas, Dysenteries, and the *Menses*, if too profuse, and is of great Efficacy in deterring malignant Ulcers, and depurating sanious ones; and for con-

solidating them, especially if used internally, as well as externally. Hence it has the Title of *Chirurgorum sapientia*; for it is of a saponaceous, as well as astringent Quality; and being applied to a Wound, conglutinates it without a Suppuration: It also provokes Urine, and is of Service in the Stone and Dropsy.

Sorbus, Offic. *Sorbus sativa*, C. B. P. The Service Tree. It is cultivated in Gardens, flowering in April. The Fruit is used. It is refrigerating, drying and astringent; and is principally used in Fluxes of the Belly and Uterus. Externally used it astringes Wounds.

Sorbus aucuparia, J. B. *Ornus*, Offic. *Sorbus sylvestris foliis domesticæ similis*, C. B. P. *Ornus sive Fraxinus sylvestris*, Park. Theat. The Quicken Tree. This Tree grows in mountainous and moist Places, flowering in May, and produces ripe Fruit in September. The Fruit is said to be a very good Hydragogue, and excellent for the Scurvy. The Liquor which distils from a Wound made in this Tree, is recommended as an excellent Antiscorbutic, and as a good Remedy for Disorders of the Spleen.

Sorbus torminalis. The Wild Service, or Sorb Tree. See *Cratægus*.

Sorghum, Offic. *Melica sive Sorghum*, Park. Theat. *Milium Arundinaceum subrotundo semine*, *Sorgho nominatum*, C. B. P. Indian Millet. It is sown in Italy. The Flowers, and the Pith in the Stalks are used. The Pith is recommended for Strumas, and the Flowers for a Dysentery, and uterine Fluxes.

Sparganium, Offic. *Sparganium ramosum*, C. B. P. *Butomus dissectâ paniculâ vulgo Platanaria quia Pilulas habet Platani Pilulis similes*. Bod. in Thoph. Hist. Branched Bur-reed. It grows on the Banks of Rivers, and in marshy Places, flowering in July. The Root is commended by *Dioscorides*, as excellent against

gainst the Poison of Serpents, taken in Wine.

Spartium. This is already taken notice of, under the Article *Genista juncea*.

Spatula fœtida. Stinking Glad-don. See *Iris fœtida*.

Spelta. See *Zea*.

Sphondylium, Offic. *Sphondylium vul-gare hirsutum*, C. B. P. *Sphondylium quibusdam, sive Branca Ursina Ger-manica*, J. B. Cow-Parinep. It grows in Meadows, and at the Bor-ders of Fields, flowering in July. The Seed is commended by Dr. Willis, from *Joannes Anglicus*, as of excellent Service in Hyſteric Pas-sions. It is reckon'd by *Buxbaume* and *Schroder*, one of the five emolli-ent Herbs.

Spica Nardi. Indian Spikenard. See *Nardus Indica*.

Spica vulgaris. See *Lawendula*.

Spina alba, *Oxyacantha*, Offic. *Spina appendix vulgaris*, Park. Theat. *Mespilus Apii foliis, sylvestris, spinosa, sive Oxyacantha*, C. B. P. The White Thorn, or Haw Thorn. It grows in Hedges, flowering in May. The Leaves and the Fruit are used, and agree in Virtues with the *Mespi-lus*, or Medlar.

Spina alba is also a Name for a Species of *Echinopus*, or Prickly Globe Thistle.

Spina Arabica. Arabian Thistle. See *Echinopus*.

Spina Cervina, } See *Rhamnus*

Spina Inſectoria, } *Catharticus*.

Spinachia, Offic. *Spinachia sive Olus Hispanicum*, Park. *Lapathum bortenſe, seu Spinachia semine spinoso*, C. B. P. Spinache. It is sown in Gardens. The Leaves and the Herb are used. Spinache, which is now so celebrated, and useful a Green, seems unmention'd, and unknown to the Antients. It is so called by the Moderns, from its spinous Seed, tho' there is also, a Species of it which bears Seed which is smooth. We are

not certain where it grows spontane-ously, but it is probably of *Spaniſh* Original, since some call it *Olus Hispanicum*; but it refuses no Soil or Climate, and is in Use in al-most all Parts of *Europe*. It is mollifying, but not nourishing; for if a Person eats a Pound of it, he voids it all again by Stool, for the Juice goes all off in Concoction, and spends itself in loosening the Belly. The fresh Herb affords a thick, but very unwholesome Juice, which mi-tigates the Asperity of the Lungs, and is of Service in Inflammations of the Intestines. It is very service-able in feverish Disorders, and is proper for old Persons, who are sub-ject to Costiveness.

Spiræa, Offic. *Spiræa Theophrasti forte Cluſio*, J. B. *Frutex spicatus fo-liis salignis ferratis*, C. B. P. Spiked Willow. It is cultivated in Gardens, flowering in July, and the Seed is ripe in August. The Seed is used, which is of an astringent Quality.

Spongia globosa, C. B. P. *Spongia marina alba*, Ger. Emac. Sponge. This is a soft, light, porous Plant, resembling a *Fungus*, and adhering to the Rocks in the Sea. Almost all Spunges are brought from the *Medi-terranean* Sea. Spunges are of Use for enlarging Wounds when too small, and being burnt, afford an excellent Powder for cleaning the Teeth. There are sometimes found in Spunges some very small Corpufcles, which by the Help of a Microscope, appear to be small *Conchæ*, which being reduc'd into Powder, are said to be good for the Sand and Gravel in the Kidneys, and also for Worms in Children. All these being burnt together, af-ford a very absorbent Powder, and emit a Smell, like that of burnt Horn. Sponge is a very remarkable Plant, because, when subjected to Distilla-tion, it affords an urinous Spirit, ex-actly resembling that procured from Animal Substances. Calcined Sponge

is celebrated for its Virtues in curing the King's Evil, and not without Reason; for 'tis certain, that in this Distemper many remarkable Cures have been perform'd by it.

Squamaria, & Squamata, Offic. *Orobanchæ radice dentatâ major*, C. B. P. *Anablatum Cordi sive Aphyllon*, J. B. Tooth Wort. It grows on the shady Banks of Hedges, flowering in April. It is consolidating, conglutinating, and good in *Hernias*, Wounds, and various Affectious proceeding from Fluxions.

Stachys, Offic. *Stachys minor Italica*, C. B. P. Base Hore-hound. It is cultivated in Gardens; flowering in June. The Leaves are used. It is of an acrimonious, and heating Quality. A Decoction of its Leaves being drank, provokes the *Menses*, and expels the Secundines. This Plant has a very strong and rank Smell; whence it is good in Hysteric, Apoplectic and Epileptic Disorders.

Staphis agria, Offic. C. B. P. *Delphinium Platanifolio*, *Staphis agria dictum*, Tourn. Inst. Staves-acre. It grows in the Gardens of the Curious. The Seeds are rough, blackish, triangular, of an acrid, hot, and burning Taste, and an ungrateful and nauseous Smell. It is only used externally, as in Masticatories, as an Apophlegmatism, Gargarisms, for the Tooth-ach, and as an Abstergent in Ulcers and Pustules.

Staphylodendron, Offic. J. B. *Pistachia sylvestris*, C. B. P. *Nux Vesicaria*, Park. The Bladder Nut Tree. It is found in Hedges, flowering in May, and the Nuts are ripe in Autumn. The Nuts are by some, supposed to agree in Virtues with Pistachio's. From the Seeds is expressed an Oil of a resolvent Virtue.

Stæbe. Silver Knapweed. This is already specify'd under the Article *Jacea*.

Stæchas Arabica, Offic. *Stæchas purpurea*, C. B. P. *Stæchas sive Spica*

hortulana, Ger. Emac. French Lavender. It grows in Spain and France, flowering in May. It is absterging, attenuant, and aperitive; its principal Uses are in Affections of the Head and Nerves, as the *Virtigo*, Apoplexy, Palsy, and Lethargy. In Diseases of the Breast, it has the same Effects as Hyssop, it also provokes Urine, and the *Menses*, resists Poisons, and gives Relief under Hypochondriac Disorders. Outwardly it is used in Lotions for the Head, Suffumigations, and other Ways.

Stoechas Citrina;

Stoechas Citrina Germanica. These are already mention'd under the Article *Helicbrysum*.

Stramonium, Offic. *Stramonia altera major, sive Tatura quibusdam*, J. B. *Solanum fætidum pomo spinoso, oblongo*, C. B. P. Thorn Apple. It grows in Gardens, flowering in June. The whole Plant is narcotic, and the internal Use of it dangerous. Outwardly it is refrigerating, and good for Burns.

Stramonium ferox, Tourn. Inst. *Datura*, Offic. *Solanum fætidum pomo grandiore spinosissimo*, Hort. Reg. Par. Dutroy. It grows in the East-Indies. The Seed of Dutroy, pulveriz'd and drank, disorders the Senses, and induces a Delirium, which lasts twenty four Hours; whence, as we are told by *Garcias*, it is us'd by Thieves to mix with the Food of those whom they design to rob. And *Acosta* tells us, that it is customary with lewd Women, to give half an Ounce of the Powder to their Gallants in Wine, or any other Liquor they like best. He who is so unfortunate as to take it, remains for a long time like one without Reason, either laughing, weeping, or sleeping, and sometimes talking, and giving rational Answers, as if he were in his right Senses, tho' the contrary be true, for he neither knows whom he talks with, nor remembers a Word of what has been said,

said, after he comes to himself. Some of these Women are so experienc'd in administering this Medicine, and know how to temper it in such a Manner, that its Effects shall last for a certain Time, or for as many Hours as they please. There are some Physicians among the Pagans, who use the Seed to provoke Urine; their Method is, first to exhibit some Emetic, then inject an acrimonious Clyster, and apply strong Ligatures to the Arms and Legs, and rub them very well; and sometimes to apply Cupping Glasses to them: If these have no Effect, they find it necessary to open a Vein in the great Toe. A Dram of the Root taken in Wine, induces a profound Sleep, and strange Dreams, full of surprising and extravagant Images. The Seeds macerated a Night in Vinegar, then carefully powder'd, are good to anoint a miliary Herpes, and spreading Erysipelas. An Ointment prepared of the Juice of the Leaves, with Swine's Fat, is a most approved Remedy for a Burn by Fire, or scalding Water.

Stratiotes, Offic. *Stratiotes Ægyptia*, J. B. *Lenticula palustris Ægyptiaca*; five *Stratiotes aquatica foliis sedo majore latioribus*, C. B. P. Water reagen. It grows about the Nile. The Leaves are used, which are refrigerating, stop Bleeding, and are good for Inflammations.

Struthium. Dyers Weed. See *Luteola*.

Styrax, Offic. *Styrax folio Mali Cotonei*, C. B. P. *Styrax Arbor*. J. B. The Storax Tree. It grows in Italy, and other Countries. The Part used in Medicine is the Resin, of which there are two Sorts to be had in the Shops, the dry and the liquid. The dry *Storax* of the Shops, *Styrax Calamita*, is a fat resinous Substance, of a yellow Colour, inclining to red, concreted into Grains of various Sizes, of a resinous, and somewhat acrid Taste, a very fragrant Smell, and flowing spontaneously from the Trunk of the Tree. Observe here,

first, that our Apothecaries and Drug-gifts sell in their Shops a most impure *Magma*, mixed with various heterogeneous Bodies, as Chaff, Hairs, Bran, and Saw-dust, for *Styrax Calamita*. Secondly, We meet with Prescriptions, in which the *Styrax Calamita* and *Rubra* are order'd distinctly. Now what is the Meaning of *Nicolaus*, in making such a Distinction, there are different Opinions. Some by the *Styrax rubra* understand the *Thymiana*, others the the best Sort of *Styrax*, which runs into Grains; and others again will have it to be nothing but the *Styrax* grown red with Age. The learned *Commelin* writes, that there are two Sorts of *Resin*, the dry and the liquid; the dry is sold in the Shops under two different Names, the *Styrax calamita*, and the *Styrax rubra*, which differ only in Purity. And *Hoffman* tells us they are the same Gum, but different in Purity; for the *Calamita* also participates something of a Redness. But when we find in medicinal Prescriptions, the *Styrax Calamita*, we are to understand it of the *Styrax* in Grains, or of what is cleansed from Impurities; but by the *Styrax rubra*, that most impure *Magma* of *Styrax*, which is commonly sold in our Shops. Chuse what is fat, consisting of pale reddish Fragments, of a lasting Smell, and which yields a melleous Liquor when it is worked.

Storax is a very good Pectoral and Cephalic, and is very efficacious in Coughs, Irritations of the Lungs, and almost all Disorders of the Breast. It is also esteem'd a Cardiac and Alexipharmic, and is said to warm and strengthen the Stomach, and promote Perspiration, and to be a Restorative and Strengtheners in Uterine Disorders, either taken inwardly, or externally by way of Suffumigation.

The *Storax liquida*, Offic. Liquid Storax, is a pinguious Liquor, of a melleous and tenacious Substance, of

a brown Colour, or brown inclining to red, of a strong Smell, and flows from the Bark of the Tree. It heats, dries, mollifies, and digests, and is very serviceable in Disorders of the Brain and Nerves, and cures Coughs, Catarrhs, Hoarseness, and the like. There are also great Disputes among Authors about the *Styrax Liquida*. Some will have it to be the same as *Stacte*, that is, stillatitious Myrrh, which appears to be a Mistake, in that the Tears of Myrrh, on account of the Similitude of Substance, will dissolve in any aqueous Liquor; whereas the *Styrax Liquida*, like other Resins, will dissolve in none but fat and oleous Liquors. Others affirm it to be a factitious Substance, prepared of a Solution of *Styrax Calamita*, in Oil and Wine boiled, with a Mixture of *Venice Turpentine*. When this Decoction is grown thoroughly cold, the *Styrax liquida* is said to separate, and fall to the Bottom, sending up a more liquid and oleous Substance to the Superficies. Some will have it made by Expression, and others assert it an Oil expressed from the Kernels of a Tree, whence the *Storax* flows; some again will have it made by a Decoction of the Bark or Wood of the *Styrax*, others of the liquid Amber. *Hoffman* asserts, that the *Styrax calamita* and *liquida*, are the same Gum, and different only in Purity; so that the *Liquid* is the best. But what is sold for *Liquid Storax* in our Shops, is a Substance merely factitious, as several Apothecaries assured Mr. *Dale*. The *Storax liquida vera*, is a Kind of Bird-Lime, prepared of the Bark of the *Rosa Mallos*, boiled in Sea Water, as I am, (says Mr. *Dale*) assured by M. *Petiver*, in the *Philosophical Transactions*. What Sort of a Tree the *Rosa Mallos* is, and to what Genus to be reduced, is quite unknown to me, and therefore I can only add, that it grows in *Cebross*, an Island in the

upper *Red-Sea*, not far from *Cadess*, which is three Days Journey from the Port of *Suet*. Whether *Cattarmija* be a Name given by the *Arabians* and *Turks* to the Tree, or the Birdlime made of its Bark, is a Thing uncertain. This Birdlime is brought to *Judda*, and from thence in the Months of *June* and *July* to *Mocha*, where in Proportion to its Goodness it is sold from sixty to one hundred and twenty Dollars a Vessel, which weighs one hundred and twenty Pounds. The best is what has the least Mixture of Dirt or Dust, with which it is very often soiled, but very easily purified from them by the Help of Sea-Water. It is us'd in mollifying the Nerves and Tendons, and dissolving scirrhus Tumors.

Suber, Offic. *Suber latifolium*, J. B. The Cork Tree. It grows in *Italy* and other hot Countries. The Fruit of this Tree is astringent, and serviceable in the flatulent Colic; the Bark is detergent and astringent, and useful in Hæmorrhages, and a *Diarrhæa*, and burnt to Ashes, is resolvent and demulcent in the Hæmorrhoids.

Succisa. Devil's-Bit. See *Morsus Diaboli*.

Sumach. See *Rhus Obsoniorum*.

Sycomorus. The Egyptian *Sycamore*. This is already specify'd under the Article *Ficus*.

Symphytum, *Consolida major*, Offic. C. B. P. *Symphytum magnum*, J. B. Comfrey. It is found in Ditches, flowering in *May*. The Root, Herb, and Flowers are us'd. The Leaves are insipid, glutinous, and give a very faint Tincture of Red to the blue Paper; the Roots give it a little deeper, and abound with a viscid Juice. This Plant contains a Salt very much resembling the Salt of Coral, dissolved in a very glutinous Phlegm, in which there is a little Sulphur, and a very little Sal Ammoniac; For, by the chymical Analy-

sis it yields several acid Liquors, a great deal of Earth, very little Sulphur, no volatile concrete Salt, but a little urinous Spirit. There is but a very small Quantity of the fix'd Salt; so that it may probably act principally by its viscid Juice, which the Fire destroys. This Plant has a viscous and glutinous Juice, and is of excellent Service in Wounds and malignant Ulcers, attended with Hæmorrhages, in bloody Urine and a *Phthisis*. The Root is insipid, but very demulcent, and the Juice is very good in an *Hæmoptoe* from an excessive Tenacity, and in *Hernias*. A Cataplasm of the Root is effectual in Punctures of the Tendons. The Herb is good in a Dysentery, and an Exulceration of the Kidnies and Bladder from *Cantbarides*; it is exhibited like the *Althæa*, but in a smaller Dose, because of its greater Mucousness. The Flowers bruised and boil'd, with an Addition of Syrup of *Althæa*, make an excellent Cataplasm for consolidating recent Wounds.

Symphytum minimum, *Bellis minor*, *Consolida minima*, Offic. *Bellis minor Sylvestris*, *spontanea*, J. B. Common Daisy. It grows in Meadows and Pastures. Its Leaves are acrid, glutinous, and give hardly any Tincture of Red to the blue Paper; which shews that its Salt is not very different from that which is natural in the Earth; that is, composed of *Sal Ammoniac*, Nitre, and marine Salt, involved in a great deal of Sulphur and Earth, which thicken the Sap of the Daisies, and render it viscous. This Plant, taken in a Ptsan or Extract, dissolves the Blood which is thicken'd by too cold an Air, as it often happens in Inflammations of the Lungs, it takes away Obstructions, facilitates the Circulation of the Blood, and restores the Fibres to their natural Elasticity; for which Reason it is thought to be very vulnerary. *Ruellius* affirms, that a Ca-

taplasm, made of Daisies and Mugwort, dissolves scrophulous Tumors, and those wherein there is an Inflammation; and gives Ease to those who are troubled with the Gout or Palsy.

Symphytum petraeum, Offic. *Symphytum petraeum foliis Thymi*, C. B. P. *Coris Monspensulana purpurea*, J. B. Heath Pine. It grows in maritime Places, flowering in May. The Herb is used, which is drying, astringent, and conglutinating: The Plant is esteem'd a good Vulnerary.

Synanchica. Squinancy Wort. See *Rubia Synanchica*.

Tabacum. Tobacco. This is already specify'd under the Article *Nicotiana*.

Tacamahaca. Tacamahac. See *Gummi Tacamahaca*.

Tagetes Indicus. African. Marygold. See *Othonna*.

Tamarindus, Offic. *Tamarindus* & *Caranda*, Bont. *Tamarindi*; *Lustanensis Tamaræazecla*, Marcg. *Siliqua Arabica*, quæ *Tamarindus*, C. B. P. *Hijabila Tamarindus*, Herm. Mus. Zeyl. *Jutra sive Tamarindus*, Pif. *Balam Pulli sive Maderam Pulli*, Hort. Mal. The Tamarind Tree. This Tree grows plentifully in *Arabia*, and both the *Indies*. The stringy Pulp of the Fruit is us'd, which is of a dark brown Colour, and a sub-acrid and acid Taste. Tamarinds are gently laxative, and are proper in febrile Heats, where not only Coolers, but Laxatives are required: They are of Service in continual Fevers and Diarrhas, strengthen the Stomach, and are commended in a Flux of the Hæmorrhoids, from a bilious and acrimonious Blood. The Leaves quench Thirst, and are useful in burning Fevers, and to kill Worms in Children; and an Infusion or Decoction of them, is a gentle Purge. The Indian Physicians, as we are inform'd by *Garcias* and *Acosta*, apply the Leaves to an *Erysipelas*.

Tamariscus, Offic. *Tamariscus Narbonensis*, Tourn. Inst. *Tamarix major sive Arborea Narbonensis*, J. B. Tamarisk. It is cultivated in Gardens, flowering in May and June, and the Bark, Wood, Tops of the Branches, and the Flowers are used. Tamarisk is heating, drying, attenuant, aperitive, abstergent, subastringent, diuretic, and splenetic. Its principal Use is in Obstructions and Tumors of the Spleen, and in Diseases proceeding from black Bile, and Serum; as the Itch, Itchings, black Jaundice, and the *Fluor Albus*. Outwardly applied, it cures the *Tinea* of the Head.

Tamariscus Germanica, Offic. *Tamarix Germanica sive minor fruticosa*, J. B. German Tamarisk. It grows in Gardens, flowering in June. It agrees in Virtues with the former.

Tamnus. Black Briony. See *Bryonia nigra*.

Tanacetum, Offic. *Tanacetum vulgare*, Park. Tanfie. It grows on the Borders of Fields, flowering in June. Tanfie is acrid, aromatic, bitter, and gives no Tincture of red to the blue Paper: The Roots are first insipid, afterwards astringent, but without Bitterness. Tanfie contains an aromatic, oily, volatile Salt, loaded with a great deal of Sulphur. By the Chymical Analysis, it yields a great deal of Oil, a pretty deal of Earth, a little urinous Spirit, and no volatile concrete Salt. Tanfie in Temperature and Virtues, agrees with Feverfew. It is vulnerary, uterine, and nephritic, and is principally used against Worms, the Gripes, Stone in the Kidneys and Bladder, Obstructions of the *Menses*, Flatulencies, and the Dropsy. The distilled Water kills Worms. The Juice drank with Plantain Water, cures all Intermitting Fevers, as also the Itch and Rheumatism; and relieves those who labour under a *Chlorosis* and *Cachexy*. The Conserve

hereof is good for the Epilepsy, Colic, and HystERIC Passion, and cleanses the Kidneys from Sand and Gravel. The Flowers dressed in a Cake, are of excellent Service in corroborating the Stomach.

Tapsus barbatus, Mullein. See *Verbascum*.

Taraxicum. Dandelion. See *Dens Leonis*.

Taxus, Offic. The Yew Tree. It grows in mountainous Places, in Woods and Hedges. The Berries of this Tree eaten, induce a Dysentery and Fever. This was a very noted Tree among the Antients, for its deleterious Quality, which proved mortal, as it was pretended, to all who took it.

Telephium, *Crassula*, *Fabaria*, Offic. *Telephium vulgare*, C. B. P. *Anacampteros*, vulgo *Faba crassa*, J. B. Orpine. It grows in Fields, flowering in June. The Herb is used, which is vulnerary, and astringent. Its principal Use is in Erosions of the Intestines, occasion'd by Dysenteries, in the Cure of Hernia's, and for Burns.

Terebinthina. Turpentine. Of this there are several Sorts, the first of which is the common Turpentine, produc'd by the *Pinus sylvestris* which see. Another Sort of Turpentine is the Venice Turpentine, a liquid Substance of the Consistence of new Honey, of a yellowish Colour, an acrid and bitterish Taste, and a grateful and fragrant Smell. It is produc'd from the *Larix* Offic. and is esteem'd heating, emollient and abstergent. It is used internally to deterge and heal the Lungs, and in Gonorrhæas: It promotes Discharges by Stool and Urine. Externally it is of great Use, being an Ingredient in a great Number of Plaisters, on Account of its maturing Quality. Another Kind of Turpentine is produc'd by the *Terebinthus*, Offic. *Terebinthus vulgaris*, C. B. P. The best is imported from the

the Islands of *Chio* and *Cyprus*, and is of a whitish Colour, clear, and almost transparent; thicker, and more tenacious than *Venice Turpentine*; of a pleasant Smell: That which comes from *Cyprus* is browner, and fuller of Dross. This Turpentine is of the Consistence of Honey, and the best of all Turpentine, for internal Use. It gives a Violet Smell to the Urine, even when given in a Clyster. It is an excellent Diuretic, and very proper in Ulcers of the Kidneys, Bladder and Uterus. In Gonorrhæas, it is commonly made into a Bolus with prepared Crab's Eyes, or any other Absorbent. It may likewise be taken in the Yolk of an Egg, from half a Dram to a Dram: All these Precautions are necessary, only to avoid the disagreeable Taste; Sugar, and powder'd Liquorice, may be used for the same Purpose. It is likewise often given in Clysters; being first dissolv'd in the Yolk of an Egg, and then mix'd with the Decoctions. It is thus administer'd in the Stone Colic; but the Intestines ought previously to be unloaded by purgative Clysters. The Dose in this manner, is from an Ounce to an Ounce and an half. Turpentine, like all other Balsams, is to be avoided in inflammatory Dispositions of all Kinds.

But that which is esteem'd the best, is the *Strasburg Turpentine*, or *Terrebinthina Argentoratensis*, which is produc'd by the *Abies*, Offic. The Silver-Fir. This is of much the same Consistence with the *Venice Turpentine*; but more transparent, bitterish, and very fragrant, and of a Taste, resembling that of a Citron. It is esteem'd vulnerary and detergent, and therefore good in Abscesses and Ulcers, in what Part soever, especially the Lungs, Breast, and Urinary Passages, which last it remarkably deterges and cleanses, from Gravel, and mucous Concretions. It is often

given in the latter End of a *Gonorrhæa*, but this must be done with Caution, because if exhibited too soon, it sometimes disposes the Testicles to swell, and if given in too great Quantities, or too long continued, it weakens the Parts, causes Gleet, and involuntary Emissions. It is sometimes boiled in Water, till it becomes hard and brittle, in order to make it less detergent, and more agglutinating. When mix'd with an aqueous Vehicle, it is order'd to be dissolv'd with the White of an Egg. All the Turpentine, externally apply'd, are esteem'd very detergent, and are much us'd by the Surgeons for Wounds and Ulcers; but they sometimes incarn too fast, and cause a Fungus. And in general, Turpentine is so extremely penetrating, that they enter the Pores of the Skin, and communicate a Smell to the Urine; and even sitting in a Room, that has been lately painted, has been often experienc'd to affect the Urine in the same Manner. *New England* produces some Turpentine, which very much resemble the finer Balsams.

Teucrium, Offic. *Teucrium multis*, J. B. *Chamaedrys frutescens*, *Teucrium vulgo*, Tourn. Inst. Tree Germander. It grows in *Italy* and *Sicily*, flowering in the Summer, and the Leaves are used. It is heating and drying, cures Disorders of the Liver and Spleen, and is effectual against Bites of Serpents. In other Respects it agrees with the *Chamaedrys*, or Germander.

Thalictrum, Offic. *Thalictrum majus siliqua angulosâ aut striata*, C. B. P. Meadow Rue. It grows in Pastures, and moist Places, flowering in *June*. The Herb and Root are used. It cicatrizes old Ulcers. It is aperitive, inciding, and provokes Evacuation by Stool and Urine. An Ounce or two purge like Rhubarb, whence it is called in *Germany* the *Poors Rhubarb*, and *Tartary Rhubarb*.

In some Parts of Italy, as *Camera-rius* informs us, they use it against the Plague; and in *Saxony* for the jaundice.

Another Species of *Thalictrum*, is the *Pseudo Rhabarbarum*, Offic. *Thalictrum majus Hispanicum*, Ger. Emac. Spanish Meadow Rue. It grows in the Gardens of the Curious, flowering in the Summer. The Root is used, which agrees in Virtues with the former, and is sold in the Herb-Shops for Rhubarb.

Thapsia, Offic. *Thapsia sive Turbith Garganicum semine latissimo*, J. B. *Turpethum Garganicum*, Schrod. Deadly Carrots. This Plant is sometimes cultivated in the Gardens of the Curious, and the Part used is the long and acrimonious Root, which is black without, and white within. *Mesue* calls it black *Turbith*, and employ'd it to evacuate thin Humours. The old Women of *Salamanca* in Spain used the Root to provoke the *Menses*, and with Emollients to promote other Evacuations, as *Clusius* assures us. The Antients expressed a Juice from this Plant, which they made use of when they thought violent Purging necessary; for the Juice of the Root inspissated, and given to the Quantity of an Ounce, purges upwards and downwards, so as sometimes to produce an Inflammation of the Stomach and Intestines; whence a Dyfentery is occasion'd. The same is so highly acrimonious as to cause Convulsions, succeeded by very bad Symptoms, which are not to be removed but by a Draught of Vinegar, Oil and Water, for which Reason the internal Use of it is dangerous. The Root has been sold for the *Turbith* of the Antients, but with very mischievous Consequences. Externally it is used in Ointments for the Itch, and the like Disorders.

Another Species of *Thapsia* is the *Turbith cineritium*, *Pseudo-Turbith*, Offic. *Thapsia faniculi folio*, C. B. P.

Seseli quæ Ferulæ facie Thapsia, sive Turbith Gallorum, Boerh. Ind. Alt. French *Turbith*. It grows in the Mountains of *Aquitain*. The Root is used, which agrees in Virtues with the former.

Thea, Offic. *The Sinensium sive Tisia Japonensibus Breynii*, Raii Hist. *Chaa Herba Japonia*, C. B. P. The Thee, or Tea Plant. There are six Sorts of Tea used in *England*. The first is called *Bohea*, which is a small blackish Leaf, which tinges the Water with a brown or reddish Colour, and renders it of a Taste like an Infusion of *Senâ*; the second Sort is called *Congo*; the third *Peco*; and the fourth *Green Tea*; and, by some *Single*. This last is of two Kinds, one consists of an oblong narrow Leaf; the other has lesser Leaves, but both are equally good, and of a blueish green Colour, seem very crisp when chewed, and tinge the Water with a pale Green. The fifth is called *Imperial Tea*; this has a large loose Leaf, whereas that of the other two last mention'd is convolved, or shrivelled up: This Species is also most sightly to the Eye, of a green Colour, crisp in the Mouth, and of a pleasant Smell. The sixth Sort is called *Heysham Tea*. All these Sorts of Tea are brought from *China*, and are supposed to be Leaves of the same Tree, and distinguish'd only by the Time of gathering, and the Method of Preparation, or as they call it, *Curing*. The fresh Leaf is said to affect the Head, and to intoxicate, but it loses these Qualities when dried and prepared. The *Japonefe* first bruise the dry'd Leaves in Stone Mortars, and then throw a sufficient Quantity into boiling Water, and suffer it to infuse but a very little while. The greatest Advantage of Tea, considering the Quantity of what is drank, seems to be, that it prevents the hot Weather from relaxing the Stomach to too great

reat a Degree, because it is a little stringent: All the other Effects of this fashionable Liquor seem to proceed from the hot Water. Tea boiled in Milk, in the Quantity of two Drams to a Pint, has been found to stop a Looseness; the Dose being repeated two or three times. *Green Tea* being drank too freely, is prejudicial to weak Lungs. They who are subject to this Disease, ought therefore to chuse *Bohea*, and to mix Milk with it, in order to make it more laxative. The Virtues which the *Chinese* ascribe to Tea, are: That it purifies the Blood, prevents frightful Dreams, and defends the Brain from malignant Vapours; cures a *Vertigo*, and Pain of the Head, especially when it proceeds from a *Crapula*; is good for Hydropic Persons, for it is a potent Diuretic; dries up Rheums of the Head; corrects the Acrimony of Humours, removes Obstructions of the *Viscera*, and restores decay'd Sight; for the *Japaneſe*, I believe, make use of a Decoction of Tea, which they call *Tebia*, as their principal Antidote against a Weakness of the Eyes, contracted chiefly from the frequent and constant Use of hot Rice, and drinking their Liquor *Sarqui*. It tempers adust Humours, corrects an hot Liver, mollifies a Hardness of the Spleen, and prevents Sleep, especially in those who are not accustomed to it. Moreover, it renders the Body brisk and lively; quickens the Senſes, prevents a *Torpor* and Drowsiness, exhilarates the Heart; repels Fear, cures Gripes and Flatulencies, discusses Wind in the *Uterus*, comforts and strengthens the *Viscera*; revives the Memory; sharpens the Wit, and tempers Bile, and is esteem'd a noble Lithontriptic. Whatever Virtues are ascribed to Tea, or however useful as a Medicine, it may be in *China*, I am very certain, that either the Tea, or the Water, or both, are extremely prejudicial, as

an habitual Drink in *England*; inſomuch, that I have known many hysterical Cases reliev'd, and some cur'd, by leaving off Tea, without taking any Remedy whatever; and one in particular, which was attended with terrible Convulsions. A great many People upon drinking a Quantity of Tea, find themselves affected with Flatulencies, and in Order to relieve these Flatulencies, are oblig'd to take Hartshorn, Spirits of Lavender, or some Cordial; and when these do not relieve the Lowness of Spirits caused by these Flatulencies, they are oblig'd to have Recourse to Wine, and then to Drams, a slow, but very certain Poison.

Tblaspi, Offic. *Tblaspi arvenſis ſiliquis latis*, C. B. P. Treacle-Mustard. It is found in Corn Fields tho' seldom, flowering in *June*. The small, black, oblong, acrimonious Seeds are us'd, which are drying and abſtergent; and principally us'd in breaking internal Abscesses, provoking the Menſes, and curing ichiadic Affections, and the like.

Tblaspi vulgare, Offic. *Tblaspi Mithridaticum ſeu vulgatiſſimum*, *Baccariæ folio*, Park. Theat. Mithridate Mustard. It grows among Corn, flowering in *June*. The Seeds are us'd, which enter the Composition of the *Theriaca*, and externally us'd cleanse all Sorts of running Ulcers; and are also, a Ptarmic. They are reckon'd an Enemy to pregnant Women, because they kill the *Fœtus*.

Thora, Leopards Bane. This is already taken Notice of under the Article *Ranunculus*.

Thus, Frankincense. See *Olibanum*.

Thuya Theophrasti, C. B. P. *Arbor Vitæ*, Offic. *Arbor Vitæ, ſive Pavidifiaca vulgo dicta odorata ad Sabina accedens*, J. B. The Tree of Life. It is a Native of *America*, and

is cultivated in the Gardens of the Curious. The Leaves are us'd as an Alexipharmic, and Diuretic. It is an opening and warming Plant, provokes the Menfes, and is good against the *Chlorosis*; bruised with Honey, it dissolves Tumors. The Oil is commended against the Gout, being rubbed on the Part; for it acts like Fire, by stimulating and opening. It cleanses Beds from Lice and Fleas.

Thymbra. See *Satureia*.

Thymelæa, Offic. *Thymelæa foliis Lini*, C. B. P. Spurge Flax. It is cultivated in botanic Gardens, and the Berries called *Grana Cnidia* are us'd, being of a caustic Quality. The English Shops, as well as some of the most skilful Botanists, take the Fruit for the *Coccus Cnidius*, or *Grana Cnidia*; but *Cordus* and *Schroder* will have the Berries of the *Mezereon* to be the *Grana Cnidia* of the Shops.

Thymelæa minor, five *Cneoron Matthioli*, Park. Theat. *Cneoron niger*, Offic. *Thymelæa affinis facie externa*, C. B. P. Rock Rose. It grows in mountainous Places, flowering in April. The Bark is us'd. It agrees in Virtues with the *Chamelæa*.

Thymelæa laurifolia, *semper-virens*, seu *Laureola mas*, Tourn. Inst. *Laureola*, Offic. *Laureola semper-virens*, flore luteolo, J. B. Spurge Laurel. It grows in Woods and Hedges, flowering in February. The Bark, Leaves, and black oblong Berries are us'd. It is of an igneous, very acrid, exulcerating, and stimulating Quality, exciting Fevers, weakening the Force of the Heart; and the noble Parts; and purging Bile and bilious Serosities with great Violence: It is corrected by Maceration in Acids.

Thymelæa laurifolia deciduo, Offic. *Lauricola farnino*, Tourn. Inst. *Mezereon*, *Chamelæa*, Offic. *Laureola fore deciduo*, five *Mezereon Germanicum*, J. B. Mezereon, or Spurge Olive. It is cultivated in Gardens, flowering in the Spring. The Bark,

Leaves, and red Berries are us'd which agree in Virtues with the preceeding.

Thymus, Offic. *Thymus vulgaris folio tenuiore*, C. B. P. Thyme. It is cultivated in Gardens flowering in June and July. The Herb is us'd which is serviceable in tartareous Affections of the Lungs and Joints, frees all the Viscera from Obstructions, and excites an Appetite. It is an excellent Plant in Suffumigations to revive the Spirits; and by its extraordinary Fragrancy, is very comfortable to the Brain, and highly exhilarating to the Heart. Infus'd in cold Wine, it cures the Bites of all venomous Animals, and is recommended against the Bite of a mad Dog. It is very effectual against pituitous and cold Diseases, particularly the Asthma and Cough. A little Thyme mixed with Wine gives it a most grateful Savour, and both the Smell and Taste of it are very penetrating; whence it becomes sudorific, inciding, penetrating, healing, and opening; and is of Service in the flatulent Colic, is properly given in difficult Labour, and removes Obstructions of the Menfes: Externally us'd, it is effectual against the Pain of the Gout, and cold Tumors.

Thymus sylvestris, Offic. *Serpyllum folio Thymi*, C. B. P. *Thymbra Hispanica Coridis folio*, Tourn. Inst. Wild Thyme. It is cultivated in the Gardens of the Curious, flowering in the Summer. The Herb is us'd, which agrees in Virtues with the preceeding.

Thymus verus, Offic. *Thymus capitatus*, qui *Dioscoridis*, C. B. P. *Hysopus capitata minor*, *Thymi odore*, Hist. Oxon. True Thyme. It grows spontaneously in Crete, but is cultivated with us in Gardens, flowering in the Summer. The Herb is us'd, which is attenuating, inciding, and opening; and is principally us'd to provoke Urine and the Menfes, and to bring away the Birth and After-Birth. It destroys

destroys Worms, purges pituitous Humours by Stool, dissolves Tumors, and dissolves concremented Blood.

Thysselinum Plinii, Tourn. Inst. *Oelnizium*, Offic. Germ. *Apium sylvestre lacteo succo turgens*, C. B. P. Milky Parsley. It grows in moist Places, flowering in July. The Root is us'd which is possessed of an alexipharmic Quality. The Plant is aperient and diuretic.

Tilia, Offic. *Tilia fœmina folio majore*, C. B. P. The Lime-Tree. It is planted in Walks and Areas, flowering in June. The Leaves and Flowers are us'd. The Leaves are drying and repellent, and provoke Urine and the *Menses*. The Flowers are heating and drying, and of fine Parts, discutient and cephalic. The *Tilia* affords us some very good Remedies, particularly in the Flowers, by an Infusion of which in Water, after the Manner of Tea, with long and constant Use, I have known says *Hoffman*, an inveterate Epilepsy perfectly cured. The Water of the Flowers is a specific in all Diseases where Pains or Convulsions are predominant; whence it justly deserves the Name of *Polychrestum*. The middle Bark of the Tree, reduced with Water to a Mucilage, is of incomparable Virtue in mitigating Pains, Heats and Inflammations; whence it gives immediate Relief in Pains of the Gout. Externally the Flowers are recommended in the Form of a Cataplasm in a *Tenesmus*.

Tilia fœmina, folio minore, C. B. P. *Tilia folio minore*, J. B. The smaller Lime Tree, Bast, or Pepper Tree. It grows in Woods and Hedges; the Flowers are us'd, and agree in Virtues with those of the preceeding.

Tithymalus. A Name for several Sorts of Spurge, of which the eighteen following are us'd in Medicine.

Tithymalus palustris fruticosus, C. B. P. *Esula major*, Offic. *Tithy-*

malus magnus multicaulis, sive Esula major, J. B. German Spurge. It is cultivated in botanic Gardens. The Root is us'd, which is oblong, an Inch thick, of a dark brown externally, and within pale and turgid, with a very acrid, purging and nauseous Milk. It is said to purge Phlegm by Stool, but so powerfully, as to require a great Deal of Caution in its Use. From the Roots, Herb, and milky Juice, an Ointment is prepared which has the Reputation of being effectual in curing contagious Eruptions of the Head.

Tithymalus Pincus, Ger. Emac. *Esula minor*, *Pityusa*, Offic. *Tithymalus foliis Pini, fortè Dioscoridis Pityusa*, C. B. P. Pine Spurge. It grows frequently in Gardens. The Root, Bark of the Root and Leaves are us'd. The Root is oblong, more slender than that of the former, of a brown Colour on the Out side, but of a whitish Yellow within, and of a pretty acrid Taste. It burns the Tongue and Fauces by its caustic Acrimony, when but tasted; but taken inwardly it purges Water from hydropic Persons, upwards and downwards, with such Violence and Disorder, as requires great Caution in using it. Both this and the former, are corrected by Maceration in Acids.

Tithymalus latifolius Cataputia dictus, Tourn. Inst. *Cataputia minor*, *Lathyris*, Offic. *Lathyris major*, C. B. P. Garden Spurge. It grows frequently in Gardens, and the Parts in Use are the round oblong Seeds, or Grains, which are bigger than a Pea, and include under a cortical Pellicle a white pinguious Nucleus, or Kernel, of a sweetish acrid and nauseous Taste, and a violent cathartic Quality; but these Grains, as well as those of the other Species of *Tithymalus*, are seldom us'd. Twelve or fourteen Grains, bruised, and taken in Wine, put the whole Body in a Commo-

Commotion, purge the Belly, evacuate Bile and Phlegm, potently provoke Vomiting, and attract Phlegm, Bile and Melancholy. The Whole of this Plant abounds with a milky, highly acrid Juice, which operates violently both by Vomit and Stool. It is classed among the Poisons which are manifestly acrid and caustic, which create a Gangrene and Putrefaction, and whose Effects are to be opposed by aqueous, tepid, somewhat acrid, and pinguious Substances; as, also, by Preparations of Honey.

4. *Tithymalus amygdaloides angustifolius*, Tourn. Inst. *Tithymalo maritimo affinis*, *Linariæ folio*, C. B. P. *Alypum Matthioli*, *Tithymalo affinis*, J. B. Narrow Leav'd Wood Sage. It grows in Woods and Thickets; and the Leaves are used, which agree in Virtues with the former Species.

5. *Tithymalus*, Offic. *Helioscopius*, C. B. P. *Tithymalus Helioscopius sive folisequus*, J. B. Sun Spurge, or Wart Wort. It grows frequently in Gardens; and besides the Virtues it has in common with the other Species, is recommended against Warts.

6. *Tithymalus Characias*, Offic. *Tithymalus Characias rubens peregrinus*, C. B. P. Wood Spurge. It grows in stony Places about France and Italy; flowering in March. The Root, Leaves, and Seeds, are of an acrimonious and caustic Quality; and the Juice as *Dioscorides* says, is a violent Cathartic.

7. *Tithymalus myrtites*, Offic. *Tithymalus myrsinites latifolius*, C. B. P. Myrtle Spurge. It grows in Calabria and Sicily; flowering in the Summer. The Root, Leaves, Seed, and Juice are used; and are said by *Dioscorides*, to be possess'd of the same Virtues as the preceeding.

8. *Tithymalus sylvaticus lunato flore*, C. B. P. *Tithymalus sylvaticus toto anno folia retinens*, J. B. Evergreen Wood Spurge. It grows in Woods; and the Root is used. It

agrees in Virtues with the former Species.

9. *Tithymalus verrucosus*, J. B. *Tithymalus myrsinites fructu verrucæ simili*, C. B. P. Rough-fruited Spurge. It grows in Fields; and the Herb is used; which agrees in Virtues with the other Species.

10. *Tithymalus paralius*, Offic. J. B. *Tithymalus maritimus*, C. B. P. Sea Spurge. It grows in sandy Places by the Sea-side, flowering in June. The whole Plant is used; its Leaves are very turgid, with a lacteous Juice, of a very acrimonious Quality; it agrees in Virtues with the other Spurges.

11. *Tithymalus cyparissias*, Offic. C. B. P. *Tithymalus cypressinus*, Ger. Emac. *Esula Officinarum*, Cæsalp. Cypress Spurge. It grows in the Gardens of the Curious, flowering in Summer. The Leaves of this Plant have the Taste of Almonds, the Milk of which has been drawn by Emulsion; they are styptic, but without any Acrimony, or Bitterness; and give a pretty deep Tincture of Red to the blue Paper; but the Roots give a much deeper: They seem at first, to have the same Taste with the Leaves, but leave at last a very considerable Acrimony in the Throat. It is very likely, that there is in the Roots of this Plant, a Salt resembling Alum, but involved in a great Quantity of resinous Sulphur. This Mixture whitens the Phlegm of the Spurge much after the same Manner, as it happens to the Magistery of Jalap, or that of Scammony; this Spurge is an excellent Hydragogue; it is corrected by macerating it in Vinegar, or the Solution of Cream of Tartar: For if one swallows ever so little of this Root, it leaves a considerable Acrimony and Burning, not only in the Throat, but all along the Oesophagus, and sometimes in the Stomach itself. The Bark of the Roots of this

this Plant, is given in Substance from a Scruple to a Dram, and in Infusion from one Dram to two. This Purgative is good for the Dropsy, Cachexy, and intermitting Fevers; it may be used in all Diseases, where it is requisite to carry off the Humours that resist the ordinary Purgatives.

12. *Tithymalus dendroides*, Offic. J. B. *Tithymalus myrtifolius arbo-reus*, C. B. P. Tree Spurge. It grows in the mountainous Parts of Naples; the Leaves, Seeds, and Juice are used. It is used as a Cathartic; for the Weight of Half an *Obolus* purges Bile, Phlegm, and ferous Humours; it is hot and dry, and excites an Inflammation and Exulceration.

13. *Tithymalus platyphyllus*, Offic. *Tithymalus latifolius Hispanicus*, C. B. P. Broad-leaved Spurge. It grows in Spain, flowering in the Summer. The Root, Leaves, and Juice are used, which have the same Virtues as the other Species. *Dioscorides* says, that bruised, and thrown into the Water, it kills Fish.

14. *Tithymalus foliis brevibus, aculeatis*, C. B. P. *Pityusa*, Offic. *Tithymalus cyparissias vulgaris*, Park. Theat. Pine Spurge with sharp pointed Leaves. It grows in Italy. The Root is used, which operates by Stool.

15. *Tithymalus rotundis foliis, non crenatis*, Tourn. Inst. *Peplus*, Offic. *Peplus, sive Esula rotunda*, C. B. P. Petty Spurge. It grows in Gardens, flowering in June. The Herb and Fruit are used. Taken in *Hydromel*, it evacuates Bile and Phlegm; sprinkled upon Meat, it excites Commotions in the Belly.

16. *Tithymalus maritimus folio obtuso*, Tourn. Inst. *Peplis*, Offic. *Peplis maritima folio obtuso*, C. B. P. Purple Sea Spurge. It grows in

sandy Places about the Sea-shore, flowering in the Summer. The Herb is used, which agrees in Virtues with the other Species of Spurges.

17. *Tithymalus exiguus procumbens, Chamæsyce dictus*, Boerh. Ind. Alt. *Chamæsyce*, Offic. C. B. P. Time Spurge. It grows in the Vineyards and Fields of Italy, flowering in the Summer. The Herb is used, and is esteem'd a Cathartic, as well as the Juice, which is a Remedy against the Sting of a Scorpion, the Place being anointed therewith.

18. *Tithymalus tuberosus pyriformi radice*, C. B. P. *Apios*, Offic. J. B. Round knobbed rooted Spurge. It grows in the Island of Crete. The Root is used, which is purgative, and is good to take away Warts.

Tormentilla, Offic. J. B. *Tormentilla sylvestris*, C. B. P. Tormentil. It grows in Pastures, flowering in June. The Root and Herb are used. The Root is hard, knotty, crooked, and fibrous, of a reddish Colour and astringent Taste. It dries and astringes, and is therefore very good in all Fluxes whether of the Belly or Uterus. It is moreover diaphoretic and alexipharmac, and is therefore given in contagious and malignant Diseases, especially if attended with a *Diarrhæa*.

Tota-bona. A Name for the *Bonus Henricus*, or English Mercury.

Trachelium, Cervicaria, Offic. *Campanula major & asperior, folio Urticæ*, J. B. Throat Wort. It grows in Woods and Hedges, flowering in July. The Leaves are used, and are recommended for the Quinsy, and for Tumors and Inflammations of the Mouth.

Tragacantha, Offic. C. B. P. Goat's Thorn. It grows in the Gardens of the Curious. The Gum is used. See *Gummi Tragacanthæ*.

Another Species of the *Tragacantha*, is the *Poterium*, Offic. *Tragacantha altera Poterium fortè Clusæ*, J. B.

J. B. Small Goat's Thorn. It grows in the Kingdom of *Granada*, flowering in the Summer. The Root is used, which being bruised and applied, conglutinates Wounds and Cuts, where the Nerves are divided; the Decoction, also being drank, is effectual in nervous Affections.

Tragopogon, Offic. *Tragopogon pratense luteum majus*, C. B. P. Yellow Goat's Beard. It grows in Meadows and Pastures, flowering in *June* and *July*. The Roots are used, which are very nutritive, and for that Reason good for lean and consumptive Persons. They are also said to cure Disorders of the Breast, the Cough, and Difficulty of Respiration, and the Pleurisy. They are also supposed to be good for the Strangury, to expel the Stone, for Estuations, and lancinating Pains of the Stomach and Thorax.

Tragorchis. Goat's Stones. A Species of *Satyrion*, which see.

Tragoriganum, Offic. *Tragoriganum Creticum*, C. B. P. Goat's Marjoram. It grows in the Island of *Crete*, flowering in *March*. The Herb is used. It is heating, provokes the *Menses*, and is a good Strengtheners of the Stomach.

Tragoriganum alterum, Offic. *Tragoriganum angustifolium*, C. B. P. *Tragoriganum Hispanicum*, Park. Theat. Spanish Goat's Marjoram. It grows in the Kingdom of *Valentia*, flowering in *March*. The Herb is used, which agrees in Virtues with the former.

Tribulus aquaticus, Offic. C. B. P. Water Caltrops. It grows in watry Places, flowering in *June*. The Herb and Nuts are used. The Nuts, while new, are good against the Stone. This Herb is refrigerating and inspissating, good for Inflammations, and for Ulcers of the Mouth and Gums.

Tribulus terrestris, Offic. J. B. Caltrops. It grows in *Italy*, flower-

ing in *July*. The Herb and Seed are used. The Herb agrees in Virtues with the former. The Seed is commended against Poisons, and restores those who are bitten by Serpents.

Trichomanes, Offic. *Capillus Veneris*, Pharmacop. *Trichomanes sive Polytrichum*, J. B. English Black Maidenhair. It grows in stony and shady Places, and upon old Walls. In the *English* Shops it is a *Succedaneum* for the *Adiantum verum*, or *Capillus veneris*, which grows not spontaneously in *England*, and is supposed to have the same Virtues, and *Tragus* ascribes the same Effects to it. The Herb, boiled in Wine, or Hydromel, and drank, removes Obstructions of the Liver, cures the Jaundice, cleanses the Lungs; helps Difficulty of Breathing; purges Melancholy by Urine; mollifies hard Tumors of the Spleen, and the Stone; and provokes the *Menses*. The same Decoction, or the Powder of the Herb, or an *Eclegma*, or Syrup prepared of it, or the distilled Water, stops all Sorts of Fluxes of the Belly, and cools Inflammations of the Liver. A *Lixivium* of the Leaves restrains the falling off of the Hair, the Head being washed therewith, and cures the Bites of Serpents, and other Animals. Some Farmers and Graziers make a singular Use of the *Trichomanes*, in curing the Diseases of the Swine. But let the Skilful judge, says *J. Baubine*, whether, an astringent, cold, and dry Herb can perform such Effects as are ascrib'd to the *Trichomanes*. The chief Virtues of this Plant, and which are allow'd by all, are in its being adapted to the Cure of Pulmonic Fevers, the Gravel in the Kidneys, and the Strangury.

Trifolium acetosum. A Name for the *Acetosella*, or Wood Sorrel.

Trifolium aureum. Noble Liverwort. See *Hepatica*.

Trifolium bituminosum, Offic. *Trifolium bitumen redolens*, C. B. P. *Asphaltites, sive bituminosum odoratum & non odoratum*, J. B. Stinking Trefoil. It is cultivated in Gardens, flowering in *August*. The Root, Leaves, and Seed are used. The Leaves and Seed taken in Water, are effectual against the Pleurisy, Dysury, Epilepsy, Dropsy, and Female Disorders, and provoke the *Menses*. They also cure the Bites of Serpents. The Root is alexipharmic.

Trifolium Hæmorrhoidale. Pile Trefoil. See *Lotus Hæmorrhoidalis*.

Trifolium Leporinum, Volck. Flor. Nor. *Lagopus*, *Pes Leporinus*, Offic. *Trifolium arvense humile, spicatum, sive Lagopus*, C. B. P. Hares Foot. It grows in Fields, flowering in *July*. The Herb is used, which is drying and astringent. It is principally used in a *Diarrhæa*, and Dysentery, and to stop the too great Flux of the *Catamenia*, and the *Fluor Albus*, and spitting of Blood. It helps the Ulceration of the Bladder, Strangury, Heat, and Pain in making Water.

Trifolium odoratum, Sweet Trefoil. See *Lotus Urbana*.

Trifolium palustre, C. B. P. *Trifolium palustre, paludosum*, Offic. *Trifolium fibrinum*, Offic. Germ. *Meynantes palustre triphyllum*, Tourn. Inf. *Acopa Dioscoridis*, Hist. Oxon. Buck Bean, or Marsh Trefoil. It grows in watry and marshy Places, flowering in *May*. The Herb is used. It is good for Diseases of the Joints, and for the Scurvy, and is greatly commended against Intermitting Fevers, Catarrhs, and the Dropsy.

Trifolium pratense, Ger. Emac. *Trifolium Lotus herba agrestis*, Offic. *Trifolium pratense purpureum*, C. B. P. Common Trefoil. It grows in Meadows, flowering in *June*. The Flowers and Seeds, boiled in Wine, are recommended by *Tragus*, to ease acute Pains, and incide the glutinous Contents of in the Intestines.

Trifolium purpureum, Offic. *Trifolium quadrifolium hortense album*, C. B. P. *Quadrifolium fuscum*, Park. Theat. Purple Wort, and Purple Grass. It is found in Meadows, and is cultivated in some Gardens, flowering in Summer. The Herb is used. The Juice expels phlegmatic Humours from the Intestines, cures Ulcers of the Mouth and the Tongue, is a Preservative against the Small Pox, and is vulgarly esteem'd a present Remedy for the Purple Fever of Children.

Triorchis. Triple Ladies Traces. A Name for a Species of *Satyrion*, which see.

Tripolium, Offic. *Tripolium majus & minus*, J. B. *After maritimus palustris cæruleus Salicis folio*, Tourn. Inf. Sea Star Wort. It grows on the Sea Shores, flowering in *July*. The Root is used, two Drams of which taken in Wine, purge off Water and Urine by Stool.

Another Species of *Tripolium*, is the *Conyza*, *Pulicaria*, Offic. *Conyza minor flore globofo*, C. B. P. *After palustris parvo flore globofo*, Tourn. Inf. Small Fleabane. It grows in Places where Water has stood all the Winter, flowering in *August*. The Herb is used, which is opening, penetrating, and good to purge the Brain. It is a good Sternutatory, and kills Fleas.

Triffago. A Name for the *Cbamaedrys* or *Germander*.

Triticum, Offic. *Triticum hybernum aristis carens*, C. R. P. *Frumentum*, *Triticum*, Chab. Wheat. This is the common Food of almost all Europe. The Meal applied externally by way of Cataplaim, is used for mollifying and relaxing Tumors, for Inflammations and Fluxions of the Eyes; and the dry'd Meal is applied to an Erysipelas, and is said to ease the Pains of the Gout. Water, in which, when heated, Bran has been infused for a Day and a Night, is good to deterge the *Furfur* of the Head; and

and a Gargarism of the Decoction of Bran, mitigates the Pain and Asperities of the Fauces. Bran boiled in Water, then put into a Bag, squeezed dry, and apply'd hot, removes the pungent Pains of a Pleurisy, if the Bag, when cooled, be heated in the same Manner, then again squeez'd and apply'd, and this Method be several Times repeated. It is certain that Bran has an absterfitive Virtue, by which the Intestines are stimulated to Excretion. Bread, therefore which is made of Flour, not thoroughly cleansed from the Bran, provided it be duly fermented, seems to us to be more wholesome, and also more savoury, than what is made of pure Flour, or *Siligo*. For outward Use, Crumbs of Bread serves for much the same Purposes as Wheaten Flour. *Galen* writes, that a Cataplasim prepared of Bread, is more digestive than one of Wheat, because Bread has a Mixture of Salt and Leaven; and his Opinion seems consonant to Reason, and is confirmed by Experience.

Triticum Indicum, Offic. *Frumentum Indicum* *Mays dictum*, C. B. P. *Mays Granis aureis*, Tourn. Inst. Indian Wheat. It is a Native of the *West Indies*. The Fruit is used, which enters the Composition of Chocolate. This is nutritious like the former, but somewhat heavier, and with more Difficulty raised into a Fermentation: for which Reason the Peasants in *France* usually roast, or parch it, by which Means it loses its Viscidity; it is very aperitive, and therefore proper in the Nephritic Colic. The Meal is of Service in emollient and suppurating Cataplasims; for, by its Viscidity, it obstructs the Pores, and is very proper for suppurating Impoethumes.

Another Species of *Triticum*, is the *Triticum spica Hordei Londinensis*, Tourn. Inst. *Zoopyrum*, Offic. *Zoopyrum seu Tritica-speltum*, C. B. P.

Hordeum nudum sive Gymnocritton, J. B. Naked Barley. It is sown in *Germany*, where it serves to make Bread, and other Sorts of Food, and is no less used than Barley. It is of a refrigerating Quality, like the *Hordeum*, or Barley, being administered in Broths to extinguish Thirst.

Triticum vulcinum, Cow Wheat. See *Melampyrum*.

Tubera, Offic. J. B. *Tubera terræ Edibilia*, Park. Truffles, or Trubs. These are more used in Cookery than in Physic, but however have the Reputation of stimulating to Veneries; boil'd and made into a Kind of Plaster, they are recommended as an external Application in a Quinsy.

Tulipa, Offic. *Tulipa præcox lutea*, C. B. P. The Tulip. It grows in Gardens, flowering in the Spring. The Root is used, which is said by some to be possess'd of the same Virtues as the Potatoes, or Parsnips.

Tunica, a Name for the *Caryophyllus ruber*, or Clove Gilly Flower.

Turbith & Turpethum, Offic. *Turpethum repens foliis Althææ, vel Indicum*, C. B. P. *Convolvulus Indicus, Alatus, Maximus, foliis Ibis nonnihil similibus, angulosus*, Rali Hist. Turbith. It grows plentifully in *Ceylon* and *Malabar*, in the *East Indies*. The Root is used. Turbith is a pretty strong Cathartic, purging tough serous Humours from the remote Parts; and thereby helps the Dropsy, Gout and Rheumatism; and is put into several of the stronger purging Compositions.

Turbith Gallorum, French Turbith. This is already specify'd under the Article *Thapsia*.

Turritis, Offic. *Turritis vulgarior*, J. B. *Brassica sylvestris sive Brassicæ affinis Turritis dicta*, Pluk. Almag. Tower Mustard. This grows in sandy Hillocks, flowering in June. The Herb is used; the Juice

Juice of which is by some, recommended for Ulcers of the Mouth, and for killing Worms.

Tussilago, Farfara, Offic. *Tussilago vulgaris*, C. B. Colts-Foot. It grows in moist Places, flowering in February and March. The Flowers, Roots, Stalks, and Leaves are used. They are of a penetrating, heating, and lenitive Quality; for which Reason, they incise thick and pituitous Humours contained in the Lungs; and are good in Coughs, Consumptions, and Pleurisies. The recent Leaves bruised in a Mortar, and boiled with double the Quantity of Sugar, are excellent in a *Phthisis*; an Exulceration of the Kidneys; a long continued ulcerous *Gonorrhœa*; and Disorders of the Stomach arising from Phlegm. Colts-Foot is accounted *alexipharmic*, because it excites Sweat. The recent Leaves, applied externally, are beneficial for the Cure of Ulcers and Inflammations. Its Juice drank for some Days, is said to cure Quartan Agues. The Leaves are bitter, glutinous, and a little styptic; they have the Taste of an Artichok, and give but a very faint Tincture of Red to the blue Paper. There seems to be in this Plant a Salt resembling that of Coral, involved in Sulphur, and a great deal of viscidus Phlegm. A strong Decoction of the Leaves is esteem'd excellent in the King's Evil, if duly persisted in.

Typha, Offic. *Typha palustris major*, C. B. P. Cat's Tail, or Reed Mace. This is found in Marshes, and on the Brinks of Rivulets. The Flowers are used, which when mix'd with well washed Hog's Lard, cure Burns.

Vaccaria, Offic. *Lychnis segetum Rubra foliis Perfoliatæ*, C. B. P. Cow Basil. It grows among Corn, flowering in June and July. The Seeds are used. It is heating, and drying; and provokes Urine.

Vaccinia, Offic. *Vaccinia nigra fructu majore*, Park. Theat. *Vitis Idæa foliis subrotundis exalbidis*, C. B. P. The great Bill-berry. It grows in mountainous Places, flowering in May. The Berries are used, which are said to be possess'd of an inebriating Quality; whence they are call'd by the Germans *Tunstel Becren*.

Vaccinia nigra, *Myrtillus*, Offic. *Vitis Idæa foliis oblongis, crenatis fructu nigricante*, C. B. P. Black Whortles. It grows in stony Places, flowering in May. The Berries are used, which are cooling, and drying, with a manifest Astringent. They are good for a hot Stomach, quench Thirst, mitigate the Heat of burning Fevers, bind the Belly, stop Vomiting, and are effectual in the *Cholera Morbus*.

Vaccinia Ursi, Park. Theat. *Vitis Idæa*, Offic. *Vaccinia Ursi, sive Uva Ursi apud Clusium*, Ger. Emac. Spanish Whortles. They grow in Italy, and other Southern Countries, flowering in May. The Fruit is used; which is said by *Dioscorides* to be good for excessive Fluxes of the Belly, Menfes, and all Kinds of Hæmorrhages.

Valeriana Græca, a Name for the *Polemonium*, Greek Valerian, or Jacob's Ladder.

Valeriana major, sive Phu majus, Offic. *Valeriana hortenensis*, Ger. Emac. Garden Valerian. It grows in Gardens, flowering in June. The Root and Leaves are used. It is a *alexipharmic*, *sudorific*, and *diuretic*. It is principally used in Weakness of the Sight, Pestilence, Asthma, inveterate Cough, Pleurisy, Obstructions of the Liver and Spleen, Stoppage of the Ureters, Hernia, and the Jaundice; and is by some accounted a good Vulnerary, and Antiscorbutic, and is effectual in all Disorders proceeding from cold, viscid, and aqueous Humours, and to be effectual in an Epilepsy.

Va-

Valeriana minor; & *Phu minus*, Offic. *Valeriana minor pratensis vel aquatica*, J. B. Small Valerian. It grows in moist Meadows, flowering in May. The Roots and Leaves are used, which as they resemble those of the following in outward Appearance, so are they supposed to agree with them in Virtues, tho' in an inferior and milder Degree.

Valeriana sylvestris, Offic. *Valeriana sylvestris magna aquatica*, J. B. Great wild Valerian. It grows in Woods and Thickets, and also about watry Places, flowering in May, June, and July. The Root is used; the Powder of which, to the Quantity of Half a Spoonful, in Wine or any other proper Liquor, is a certain Remedy for the Epilepsy. They exhibit it in Milk, in a smaller Dose for Boys, and young People. It is good for Ruptures, Convulsions, and for Bruises receiv'd from Falls. It is also good for Inflammations and Exulcerations of the Mouth and Gums, and for *Aphthæ*. It cures a Tertian Fever. The Leaves of this Plant have no Smell, but an herby, saltish, bitter Taste; and give a pretty deep Tincture of red to the blue Paper; the Roots stain it a little; they are bitter and styptic, of an aromatic penetrating Smell, and something disagreeable.

Valerianella, arvensis præcox humilior, semine depresso, Tourn. Inst. *Lactuca agnina*, Offic. *Locusta Herba prior*, J. B. Lamb's Lettuce, or Corn Sallad. It grows among Corn, and in Gardens, flowering in the Spring. It is cooling and moistening; being in Temperament and Virtues, not unlike Lettuce, and supplies its Room in Winter, and the Beginning of Spring. It is eaten among Sallads, and is reckon'd the best Ingredient among them.

Vanilia, Vanelloes. See *Banilia*.

Veratrum. White Hellebore. See *Helleborus albus*.

Verbascum, Tapsus barbatus, Offic. *Verbascum mas latifolium luteum*, C. B. P. Mullein. It grows by the Sides of Ditches, flowering in July. The Leaves and Flowers are used. The Leaves are of an herby Taste, a little saltish and styptic; they smell like Elder; and give a pretty deep Tincture of red to the blue Paper: The Flowers give it a deeper. They are also styptic, but sweet. It is probable that the Salt of this Plant, in some measure, resembles that of Coral. The Leaves bruised, and applied to any Part affected with Pain, remove the same; They are of a demulcent Quality; for which Reason they are an Ingredient in Decoctions, Clysters, and Cataplasms, in all Disorders where Acrimony offends; being of great Service by their insipid, viscous, emollient, and saponaceous Juice. Of the Flowers, with a Solution of Oil of Olives is prepared Oil of *Verbascum*, which is very good to consolidate Wounds, and to mitigate Pains; and taken inwardly is a Laxative. The Flowers are made into a Conserve, which is excellent against all Hæmorrhages, Spitting of Blood from Contusions, bloody Urine, immoderate Fluxes of the *Menses* or *Lochia*, the *Tenesmus*, Dysentery, and the falling down of the *Uterus* and *Anus*. The Decoction of the Leaves is effectual in the Colic, *Diarrhæa* and Dysentery, and a Decoction of the Flowers makes a good Gargarism in the Quinsy, and a violent Cough: The Leaves boiled in Milk, are effectual in the *Tenesmus* and *Hæmorrhoids*. The Juice of this Plant is of great Efficacy in the Gout. The Decoction of the Leaves in Water is used in Clysters, as an Emollient for the *Hæmorrhoids*; and may also be injected into the *Uterus*, for the Purpose of mollifying. The Plant, in short, is emollient, aperient, and

and relaxing; and therefore enters the Composition of all emollient Clysters and Cataplasms. Outwardly the Leaves and Flowers are useful Topics, in mitigating all Kinds of Pains, particularly in Tumors of the *Anus*, and in the *Hæmorrhoids*.

Verbasum album, Offic. *Verbasum Elychnitis flore albo parvo*, C. B. P. Mullein with white Flowers. It grows in several Places by Path-ways, flowering in *August*. The Leaves are used, which agree in Virtues with those of the preceeding.

Verbasum nigrum, Offic. *Verbasum nigrum flore ex luteo purpurascete*, C. B. P. Black Mullein. It grows by the Sides of Ditches, flowering in *July* and *August*. The Root, Leaves and Flowers are used. The Root is astringent, and of Service in a Looseness. The Leaves and Flowers agree in Virtues with those of the common *Verbasum*.

Verbena, Offic. *Verbena communis flore cæruleo*, C. B. P. Vervain. It grows in Highways, flowering in the Summer. The Root and Herb are used. It is cephalic, alexipharmic, and vulnerary, and is principally used in Pains, Affections of the Head, inveterate Coughs, Obstructions of the Liver and Spleen, the Jaundice, and Dysentery, to break and expel the Stone, and for Tertian Fevers. The Root is accounted by some as an effectual Amulet against stumous Tumors; and is hung about the Neck, by some old Women, as an efficacious Medicine for those Purposes. The Powder of the Leaves is good for the Dropsy. The Leaves bruised, and applied in the Form of a Cataplasm, is a very good Resolvent in Pains of the Sides, and the Pleurisy. The distilled Water, as well as the Juice, cure Inflammations of the Eyes, and all Sorts of Wounds, increase Milk in Women who give Suck, and give Relief under a flatulent Colic. This Plant yields

by the chymical Analysis, several acrid Liquors, a great deal of Oil, and a pretty deal of volatile concrete Salt and Earth: Thus it may contain some *Sal Ammoniac*, united with a great deal of Sulphur.

Veronica scæmina, *Elatine*, Offic. *Elatine folio subrotundo*, C. B. P. *Veronica scæmina Fuchsi sive Elatine*, Ger. Emac. Female Fluellin. It grows in Fields, flowering in *July*. The Herb is used, which is vulnerary. The express'd Juice either internally taken, or externally applied, is said to be good for sordid and cancerous Ulcers. The Leaves boiled are good for a Dysentery. The Leaves are very bitter, a little styptic, and have a Smell a little oily; they hardly give any Tincture of red to the blue Paper. Whence we may conjecture, their Salt very much resembles the natural Salt in the Earth, being joined with a great deal of Sulphur, and terrestrial Parts.

Veronica mas, *Betonica Pauli*, Offic. *Veronica mas supina & vulgarissima*, C. B. P. Male Speedwell. It grows in dry Pastures. The Herb is used. It is commended for subduing Phlegm, for detarging the first Passages, for pulmonic Diseases, the Scurvy, *Phthisis*, and Stone, being boiled with Liquorice. Infused in Water, it impregnates it with the Smell, Taste, and all the Virtues of the *Chinese Tea*, and has the same Effects. It relaxes with a moderate Astringent, whence it is recommended in a Scurvy, proceeding from Relaxation; it is proper also, in spitting of Blood, because it has an astringent and somewhat of an aromatic Virtue; it heats, dries, strengthens, and resists Putrefaction. It is very penetrating; for, if it be tasted, it affects the whole Mouth, as if it were set on Fire. It affords not much Salt, but a very copious Humour; and has the Virtue of resolving the Humours. The Decoction

of the Herb in Whey, daily drank, cures the Scurvy, as we are assured by *Eugalenus* and *Sennertus*, and resolves scorbutic Tumors; it is good, also, against the *Scabies*. The Juice drank for a long time together, is effectual against the Gout; for let the Patient take but two or three Ounces every Day for a Month together, and all the morbid Matter will be discharged out of the Blood by Urine, as is said. The Juice may be preserved a long time in Winter, if to the Quantity of one Ounce you put four Drops of the Spirit of Sulphur by the Bell. It incides viscid Phlegm molesting the Lungs, and is good in Coughs, Colic, *Nephritis*, *Phthisis*, and the Itch: It is excellent in Clysters for the Colic. The Infusion of it in Wine is effectual in the *Chlorosis*; and the Powder, according to *Casalpinus*, cures the Dropsy. The Juice cures Intermittent Fevers; the distilled Water depurates the Eyes; and a Gargarism, prepared of a Decoction of the Leaves, cures the Quinsey. The Use of it, after the manner of Tea, is effectual in Obstructions of the Spleen, Pancreas, and Mesentery; it is of excellent Use in the Head-ach and *Vertigo*, is of Service in the *Fluor Albus*, and all cutaneous Diseases, as well as a Cancer. I have cured, says *Boerhaave*, in his *Hist. Plant.* a hundred Diseases with this Plant; for it has the Virtue of dissolving pituitous, viscous, oleous, and almost all other Kinds of Humours. An Infusion of *Veronica*, is recommended by *Heister*, to be used warm, as a Resolvent in an *Epiphora*, or *Oculus Lacrymans*; he further observes, that this Infusion is highly commended by *Schobinger*, a Disciple of *St. Yves*, for an incipient *Fistula Lacrymalis*. The Leaves of this Plant are bitter, and give a pretty deep red Colour to the blue Paper, which gives us Reason to believe, that their Salt very much resembles

that of Coral; but that of the Speedwell is, charged with a great deal more Acid than the ordinary Salt of Coral, and is joined besides with a great deal of Sulphur: For, by the Chymical Analysis, we obtain from this Plant, a great deal of Earth, Acid and Oil.

Veronica Teucrii facie, Park. Theat. *Chamædrys spuria angustifolia*, Offic. J. B. *Veronica supina*, Ger. Emac. Germander Speedwell. It grows in Botanic Gardens, flowering in June. The Herb is used, which agrees in Virtues with the preceding.

Veronica minor, Hist. Oxon. *Chamædrys spuria latifolia*, Offic. J. B. Bastard Germander. It is cultivated in Gardens, flowering in June. The Herb is used, which agrees in Virtues with the Male Speedwell.

Vetonica. A Name for the *Caryophyllus ruber*, or Clove Gilly Flower.

Viburnum, Offic. *Lantana vulgo*, aliis *Viburnum*, J. B. The Wayfaring Tree. It grows in Hedges, flowering in Summer, and the Berries are ripe in September. The Leaves and Berries are used, and are drying and astringent; whence they are commended for Inflammations of the Tonsils and Throat, the falling down of the *Uvula*, the Looseness of the Teeth, and Fluxes of the Belly.

Vicia, Offic. *Vicia vulgaris sativa*, J. B. Common Tare. It is sown in Fields. The Seeds are used. Tares are heating, drying, cleansing, absterfive, and astringent.

Vicia alba, Offic. *Vicia sativa alba*, C. B. P. White Tare. It is sometimes sown in Gardens. The Seeds are used, which agree in Virtues with the preceding.

Vicia lutea, foliis Convolvuli minoris, C. B. P. *Aphaca*, Offic. Yellow Vetchling. It grows among Corn, flowering in June. The Seeds are used, which are possess'd of an astringent

astringent Quality, by Virtue of which they stop Fluxes of the Belly and Stomach, if roasted.

Vicia sylvestris, *Aracus*, Offic. *Vicia semine rotundo nigro*, C. B. P. Strangle Tare, or Wild Vetch. It grows in Hedges, and among Corn, flowering in the Spring. The Herb is used, which agrees in Virtues with the other Species.

Victoralis. Spotted Ramsons. A Species of *Allium*, which see.

Vinca pervinca, Offic. *Vinca pervinca vulgaris*, Park. Theat. *Pervinca vulgaris angustifolia flore cæruleo*, C. B. P. Periwinkle. It grows in Fields, flowering in May. The Herb is used. It is vulnerary, and is principally used in Fluxes of the Belly, a Dysentery, Hæmorrhoids, spitting of Blood, Hæmorrhages of the Nose, and for an Excess of the *Catamena*.

Vinca Pervinca Officinarum, Buxb. *Pervinca vulgaris latifolia flore cæruleo*, Tourn. Inst. The greater Periwinkle. It grows by the Sides of Ditches, flowering in April. The Herb is used, which agrees in Virtues with the preceding.

Vincetoxicum. Swallow-wort. See *Asclepias*.

Viola, Offic. *Viola Martia purpurea*, J. B. Purple Violets. They grow in Hedges, and about the Sides of Ditches, flowering in March. The Leaves, Flowers, Seeds and Roots are used. The Leaves are emollient and laxative, and are used in Fomentations, Cataplasms, and Clysters. The Flowers have an Anodyne, demulcent and antiphlogistic Virtue; they are infused in the purest Rain Water, from whence by often repeating the same, is prepared the *Syrupus Violarum sine Coëctione*, by adding four times the Weight of Sugar. This Syrup is very palatable, gently opening, corrects every thing acrimonious, and loosens the Belly. The Seeds are potent Hydragogues, but

are seldom used except in Obstructions of the Kidneys, and the Nephritic Colic. The Root purges upwards and downwards. This Plant is pectoral and cordial, and proper in Coughs, Dryness of the Tongue, and Asperities of the Fauces, as also, in Catarrhs, *Phthisis*, and the Pleurisy. It is principally used to mitigate the Heat of Fevers, and for the Head-ach. The Root of this Plant is a little saltish, glutinous, and deterfive; neither it, nor the Leaves, which are insipid, and pretty glutinous, give any Tincture of red to the blue Paper; the fresh Seeds give it a little, and are saltier than the Roots. There is a glutinous Sap in the Violets, which clogs the other Principles, and hinders their Motion: For, by the Chymical Analysis, we obtain from this Plant several acid Liquors, a great deal of Oil, a pretty deal of volatile, concrete, and fixed lixivial Salt.

Viola tricolor, Offic. *Viola tricolor hortensis repens*, C. B. P. *Jacea tricolor sive Trinitatis flos*, J. B. Heart's Ease. It grows in Gardens, flowering in May. The Herb is used, which agrees in Virtues with the preceding. Dr. Baynard says it is a Cure for Madness.

Viola Lunaria, Offic. *Viola lunaria major siliqua oblonga*, C. B. P. Sattin Flower with long Pods. It flowers in May. The Leaves are used. A certain Swiss Surgeon, as *Camerarius* says, prepared a good vulnerary Ointment of the bruised Leaves of this Herb and Sanicle.

Viola Mariana, Offic. *Viola Mariana Dodonæi quibusdam Medium*, J. B. *Campanula hortensis folio & flore oblongo*, C. B. P. Coventry Belis. It is cultivated with us in Gardens, flowering in the Summer. The Root, which is seldom used in Medicine, is as a Food, esteemed refrigerating, drying, and astringent.

Viperaria. Viper's Grass. The same as *Scorzonera*.

Virga aurea, Offic. *Virga aurea vulgaris latifolia*, J. B. Golden Rod. This Plant, as we are told by *Tournefort*, is a Native of *Canada*, but is now common throughout *Europe*, because the Seeds brought from that Country have diffused themselves thro' all the *European* Regions, and grow without Difficulty. It flowers in *August*. This Plant is so acrimonious, that no Pepper can be compared with it, tho' it leaves not the least Relish of Acridness in the Mouth, but proceeds thro' the whole Body. It is like the *Ranunculus acris* of the Shops, and is of a moderately or somewhat astringent Taste, which at first is not unpleasant, but leaves an ungrateful Relish in the Mouth. *Barclay* in his *Satyricon* says, that he cured a Person of Quality, to whom he was sent on an Embassy, of the Stone, and a Suppuration of the Kidneys, with the Powder of the dry'd Leaves. Three or four Ounces of the Plant macerated in Water, are a good vulnerary Dose, and proper for internal Hæmorrhages, the Dysentery and *Diarrhæa*. Externally it depurates Wounds, absterges Putridness, of the Gums, fastens loose Teeth, and cleanses malignant Ulcers and Fistulas. I have often exhibited it, (says *Boerhaave* in his *Hist. Plant.*) with great Success, in all Sorts of putrid, viscid, and cold Indispositions. The Leaves duly dry'd, and infus'd after the manner of Tea, and drank with an Addition of Honey, are highly corroborative and deterfive, and of extraordinary Efficacy in Ulcers of the Lungs, and Wounds of the Breast, and other Parts. Golden Rod is styptic, bitter, and gives no Tincture of red to the blue Paper. It is likely that its Salt resembles that which is natural in the Earth; but it is mixed with a great deal of Oil, and terrestrial Parts.

Virga Pastoris. Shepherd's Rod. See *Dipsacus*.

Viscum, Offic. *Viscum baccis albis*, C. B. P. *Viscus quercus & aliarum arborum*, J. B. Mistle, and Mistletoe. It grows upon several Trees, but especially upon the Oak, which last is most esteem'd. The Wood, Leaves, and the glutinous Matter which is found in the Berries, and Bark, called Birdlime are used. The Wood is of principal and specific Use in the Epilepsy; it is also prescribed for the Apoplexy and Vertigo, taken inwardly, or hung about the Neck: For these Disorders it is acknowledged to be effectual, by the unanimous Consent of antient and modern Physicians. We know some, says *J. Baubine*, who have made use of the Wood of *Viscum*, macerated in Wine, with Success against the Vertigo. The Powder of *Viscum*, especially what grows upon Oaks, not only cures the Epilepsy, but provokes the *Menses*. It is also an *Arcanum* against a Pleurisy, being taken once, and again, and a third Time, in Water of *Carduus* and Poppy. *J. Baubine* writes that he has several Times advised the Use of *Viscum*, bruised and macerated in proper Waters, against Worms of the Intestines in Children. The Powder of the *Viscum* which grows on the *Oxyacanthus*, being infused in white or *Spanish* Wine, and given two Hours before the Paroxysm, or Fit, and the Dose repeated, if necessary, has often removed, and perfectly cured a Quartan. The Leaves after they have been chewed, and ground by the Teeth of labouring Beasts, and Cows, are by our rustic People, esteemed effectual for expelling the *Secundines*. The Birdlime, or Glue, used for Fowling, was much employ'd by the Antients in Medicine. It has the Virtue of mollifying and dissolving Tumors, the *Parotides* and Abscesses, being mixed with Rosin, and

an equal Quantity of Wax; it also cures the *Epinyctides*, and, as *Pliny* says, dries up strumous Ulcers, and cures the Epilepsy. It is good for many other Disorders, according to *Dioscorides*, *Pliny*, and *Galen*.

Vinaga, Offic. J. B. *Gingidium umbella longa*, C. B. P. *Fœniculum annuum, umbellâ contractâ, oblongâ*, Tourn. Inst. Spanish Pick Tooth. It is cultivated with us in Gardens, flowering in Summer. The Leaves are used. The Pedicles or Footstalks, of the Umbellas, on account of their Stiffness, and sweet Scent, serve for Tooth-picks, with many Persons, especially among the Spaniards, whence we call it *Spanish Pick Tooth*. It agrees in Medicinal Virtues with Fennel.

Vitex. The Chaste Tree. See *Agnus Castus*.

Vitis, Offic. *Vitis vinifera*, Commel. Plant. Usual. The Vine. This is a Vegetable too well known to require any Description. The Leaves and the Tendrils of the Vine are refrigerating and astringent, and are us'd in Dysenteries, Vomiting, a Pica, Spitting of Blood, and other Hæmorrhages. The Juice which distils from the young Shoots when cut, taken internally, has the Reputation of breaking and expelling the Stone: Externally it is said to cure Dimness of the Sight, Redness of the Eyes, and cutaneous Eruptions. The immature Grapes are refrigerating, drying and astringent, and are us'd to excite an Appetite, and check a Diarrhœa. The ripe Grapes, and their unfermented Juice, are extremely saponaceous, resolvent and detergent, and if taken in pretty large Quantities, will excite a *Diarrhœa*, with very good Effects, if not carry'd too far. The *Acini* or Grape Stones, are esteem'd astringent, and are recommended in Vomitings and Fluxes. Wine, Vinegar, and

Tartar, are produc'd from the Juice of the Grape after Fermentation, and these are taken Notice of under their respective Articles.

Vitis Corinthiaca, sive Apyrina, J. B. *Uvæ Passæ minores, Passulæ*, Offic. *Corinthiaca*, Park. Theat. The Currant Vine. It is cultivated in Zant and Cephalonia. The ripe Fruit dry'd, is used. It is cooling, mitigates febrile Heat, allays Thirst, and purges the Belly.

Another is the *Uva passa major*, Offic. *Uva passa major, Bepas*, & *Græcis forte*, C. B. P. Raisins of the Sun. They are brought to us from Spain, and are hot or temperate, lenient, loosen the Belly, correct Acrimony, are grateful to the Stomach, Lungs, and Liver, and mitigate a Cough.

Vitis alba, a Name for the *Bryonia alba*, or White Bryony.

Vitis Idæa. See *Vaccinia*.

Vitis marina, a Name for the *Fucus folliculaceus*, or Sea Lentils.

Ulmaria, Regina Prati, Offic. *Ulmaria, Barba Capri floribus compactis*, C. B. P. Meadow Sweet. It grows in moist Meadows, flowering in July. The Herb is used. It is antispasmodic, Antiepileptic, corroborative and astringent. Hence it is used by the Peasants for a Dysentery, *Diarrhœa*, and to repress Vomiting. It is of Service in regulating the disorderly Motions of the Heart, Blood, and Spirits; and wherever Condensation, Strengthening, and Astriction, are required, this Herb is of excellent Use. The Leaves are good for an Hæmoptoe; and the bruited Root is applied to Wounds, in order to stop the Blood, and consolidate the Part. A Decoction of the Root is proper in malignant Fevers. The Leaves have an herby, saltish and glutinous Taste; they give a faint red Colour to the blue Paper; the Root gives it a deep one; it is styptic, and a little bitter; its

Salt seems to resemble *Sal Ammoniac*; but it is united with a great deal of Sulphur, and a pretty deal of Earth. By the Chymical Analysis it yields some acid Liquors, and some volatile concrete Salt, a good Quantity of Sulphur, and a pretty deal of Earth.

Ulmus, Offic. J. B. *Ulmus campestris* & *Theophrasti*, C.B.P. Common Elm. It grows in Hedges, and the Bark and Leaves are used. The Bark is said to have an agglutinating Virtue, to mitigate Arthritic and Ischiadic Pains, to purge, and carry off Phlegm and Water. A Decoction of the internal Bark, is frequently us'd as a Gargarism, in Quinsseys, and Asperities of the *Fauces*. The Leaves are astringent.

Ulmus montana, Offic. C. B. P. *Ulmus latiore folio*, Park. Theat. The Wych Hasel. It grows frequently in Hedges. The Bark is used, which agrees in Virtues with the preceding.

Umbilicus Veneris. This is already taken Notice of under the Article *Cotyledon*.

Urtica, Offic. *Urtica major vulgaris*, J. B. Common Stinging Nettle. It grows in Hedges, and among Rubbish. The Nettle is furnished with small, slender Spines, of so flexible a Nature at the Extremities, that when they enter the Skin they easily bend; but when they penetrate the Flesh they cannot be drawn forth, but are there broken off as it were into Fragments, and excite an Inflammation and Vesicles, which continue till the Pieces are expelled. The Decoction of the Leaves is aperitive, and commended against the Gout. The greenest and freshest Stalks are used to whip the Limbs affected with the Gout or Palsy, in order to excite an Inflammation in the external Parts. This Plant is of Service in the Diseases of the Kidneys and Bladder, Coughs, *Phthisis*, internal Hæmorrhages, *Hæmoptysis*, Vo-

miting of Blood, an immoderate Flux of the Hæmorrhoids, and Bloody Urine. The Leaves bruised and apply'd, resist a Gangrene, and a Decoction of them drank in the Manner of Tea, is an excellent Laxative. The Leaves of Nettles have an insipid, glutinous Taste, and give no Tincture of red to the blue Paper; the Roots stain it very little; they are insipid also, but a little styptic; from which we may conjecture, that the Nettles contain a Salt resembling that which is naturally in the Earth, that is to say, composed of *Sal Ammoniac*, Nitre, and Marine Salt; but in these Plants it is clogged with a great deal of glutinous Phlegm, and united with abundance of Sulphur and terrestrial Parts: For, by the Chymical Analysis we obtain from Nettles some volatile concrete Salt, a great deal of Sulphur and Earth, and several Liquors, which give a greater Indication of an acid, than an acid Salt; so that it is very probable, that the Phlegm of this Herb is thicken'd rather by the terrestrial Parts, than by the acid: But this thick Phlegm which is very considerable, is entirely destroyed by the Fire.

Urtica Romana, Offic. *Urtica Romana sive mas cum globulis*, J. B. Roman Nettle. It grows in sandy Places, and the Seeds are used, which are recommended in Pulmonary Affections, the *Asthma*, stubborn Coughs, Pleurisy and Peripneumony.

Urtica mortua. A Name for the *Lamium album*, or white Archangel.

Ufnea Cranii Humani, Offic. *Muscus ex Cranio Humano*, Ger. Emac. Moss of a dead Man's Skull. This Species of Herb which adheres to the Skulls of Carcasses exposed to the Air, is by different Authors recommended as highly beneficial in various Diseases. Thus it is extol'd as a Specific in Epilepsies, and all Disorders of the Head, in Hæmorrhages
pro-

produced by whatever Cause, and in Dyſenteries. It is uſed internally, externally, alone, mixed with other Subſtances, and as an Amulet. In Hæmorrhages it produces its Effects, if only held in the Hand. Thus *Boyle*, in his *Specifics*, informs us, that he himſelf had an Hæmorrhage of the Noſe ſtopt by uſing it in this Manner. *Juncker* whimſically informs us, that it renders the Body ſo impenetrable as not to be pierced with a Muſket Bullet. Some affirm, that the Virtues of that *Uſnea* are greater, which has been gathered from the Skulls, during a certain Poſition of the Stars; when for Inſtance, the Moon is in the Increaſe in the Houſe of *Venus*, when ſhe is in *Piſces*, *Taurus*, or *Libra*. Others affirm, that the *Uſnea* gathered from the Heads of hang'd Perſons is beſt: But *Paracelſus* aſſerts, that what is found on the Skulls of Perſons broken on the Wheel is no leſs valuable. *Grube in Arcan. Med.* informs us, that thoſe who greatly extol the *Uſnea* in Medicine, ſuppoſe that the Vital and Animal Spirits of the deceaſed Perſon are collected in it, and by a certain Medicinal Force derived to any Part affected in a living Perſon. But as every one knows, that a Carcaſe has neither Vital nor Animal Spirits, thoſe ſeem to be in the right who give no Credit to the peculiar Power of this Plant, or its ſpecific Virtues in removing obſtinate Diſorders. But *Juncker* affirms, that the Virtues of this Plant are founded on Credulity, or ſome other Error. Beſides, the Force of Imagination may be ſuppoſed to co-operate ſtrongly with this Medicine, as *Boyle* thinks, when he informs us, that if a certain Perſon when Blood was taking from him, took *Uſnea* in his Hand for the Sake of Curioſity, the Blood ceaſed to flow till he laid it aſide again. *Marx*, a celebrated

Dealer in Aromatics in *Nurcemberg*, does not hesitate to affirm, that the *Uſnea* of the Human *Cranium* is of no other Uſe but to be preſerved as a Rarity. And *Boecler* is of Opinion, that, as with the Bones of dead Bodies, ſo alſo with the *Uſnea* many ſuperſtitious and impious Things are done. But *Rieger* is of Opinion, that in Hæmorrhages, where ſtyptic Tents or Peſſaries are expedient, the *Uſnea* mixed with other proper Ingredients, may produce happy Effects. Beſides where exſiccant and aſtringent Medicines are proper, its Powder, whether uſed externally or internally, muſt certainly produce ſome Effect; for it is of a drying and aſtringent Nature. Thus I agree (ſays *Rieger*) with *Pauli*, who ſpeaks in this Manner: "Though the *Uſnea* may produce good Effects in Spittings of Blood, Hæmorrhages, and other Fluxes; yet there is no Neceſſity why a Phyſician ſhould diſgrace his Profeſſion by preſcribing it, ſince there are other Subſtances equally aſtringent, and which no Patient will reſuſe on account of the Horror and Nauſea they produce." *Etmuller* informs us, that ſome ſupply the Place of the true *Uſnea* with the Moſs of a Tile, which in Hæmorrhages of the Noſe they immerſe in Vinegar, and apply to the Crown of the Head; whereas inſtead of the true *Uſnea*, which is rare, others uſe one of the artificial Kind, which they obtain in the following Manner: They take the Moſs of large Meadow Stones, gathered in the Month of *April*; this, when gently dried, they reduce to a groſs Powder in a Glaſs Mortar, ſprinkling it with *Malmſey* Wine, till it has acquired the Conſiſtence of a thick Poultrice. Then with a Knife they ſpread this Preparation very thin on the *Cranium* of a Carcaſe broken on

the Wheel. As it becomes gradually dry, they spread more of it on the *Cranium*, which in the open Air they expose to the Rays of the Sun, removing it when Rains come on. This they repeat till the Plant begins to flourish, and afterwards gather from it an *Usnea* not inferior to that which grows spontaneously from the Scull. *Ludovicus*, when treating of Vulneraries and Astringents, speaks thus: "Moss may be every-where found; and that obtained from the Oak, and the common Egyptian Thorn, for Medicinal Purposes, in Pessaries; for Instance, Tents, and Ointments are not inferior to the *Usnea*, gathered in the most superstitious Manner, or even that growing on Human Skulls."

Uva crista, Goose Berries. See *Grossularia*.

Uva Gruina, Offic. *Vitis Idæa palustris Virginiana*, fructu majore, Raii Hist. Crane Berries. They are brought from New England, and are supposed to be excellent against the Scurvy.

Uva marina, Sea Grape, or Shrub Horse-tail. See *Ephedra*.

Uva { *passa major*. } See *Vitis*.
 { *passa minor*. }

Uva Ursi, Spanish Whortles. See *Vaccinia Ursi*.

Vulneraria. A Name for the *Anthyllis leguminosa*, or Kidney Vetch.

Uvularia. A Name for the *Bislingua*, or double Tongue.

Winteranus Cortex, Winters Cinamon. See *Cortex Winteranus*.

Xanthium, Loufe Burr. This is already specify'd under the Article *Bardana*.

Xochinacaxtli, seu *Flos Auriculæ*. Hern. *Fructus oblongus, cineraceus acidulus*, C. B. P. *Orejuelas*, seu *Orichelas*, Hughes. It grows in New Spain, and the Flowers enter the Composition of Chocolate, in order to give it a fine Smell, and a plea-

sant Taste. The Plant is hot and dry, dissolves Flatulencies, attenuates Phlegm, and heats and strengthens a weak and cold Stomach.

Xylo-aloes. A Name for the *Agallochum*, or Aloes Wood.

Xylobalsamum. This is the Wood of the Tree, which produces the true Balsam, or *Balsamum à Mecha*.

Xylon. The Cotton Bush. See *Gossypium*.

Xyris. A Name for the *Iris foetida*, or Stinking Gladdon.

Yucca, Offic. *Yucca foliis Aloes*, C. B. P. Indian Bread. It grows spontaneously in America, and is cultivated with us in Gardens. The Root is used, which affords a soft Pulp, which some condemn as Poison, others affirm to be esculent. The recent Root eaten is poisonous, but being bruised, then dried in the Sun, it affords a Bread commonly eaten by the Indians. The Juice of the Root is so poisonous, that they take Care to convey it deep under Ground, that it may not come to the Taste of Animals, to which it would certainly prove mortal.

Zacintha, *Cichoreum verrucarium*, Offic. *Chondrilla verrucaria foliis Cichorei viridibus*, C. B. P. Wart Succory. It grows in Gardens, flowering in June. The Herb is used, which is diuretic, and edulcorating, and allays the immoderate Heat of the Blood. It is reported to be of surprising Virtue in removing Warts.

Zea, *Spelta*, Offic. *Zea dicoccos vel Zea major*, C. B. P. Spelt Wheat. It grows in Italy. The Germans make Bread of Spelt, as white as that of Wheat, but lighter, and less nutritive; while new it is sweet and easy of Concoction, but when stale it is not so grateful, and is besides difficult of Digestion. Broth or Gruel made of the Flour of Spelt, is astringent, and therefore adapted to the same Purposes, as if prepared with

with Rice, being proper in an *Hæmorrhæsis*, Dysentery, *Diarrhæa*, and the like, especially when boiled with Calve's Feet.

Zea verna, J. B. *Olyra*, Offic. *Zea Amylea* sive *Olyra*, C.B.P. Sprat Corn. It is sown in *Germany*, and reaped late. The Seeds are used in the Kitchens of *Germany*. It agrees in Virtues with the preceding, but is somewhat less nutritive.

Zea monococcus. St Peter's Corn. See *Briza*.

Zedoaria. Zedoary. We have two Kinds of this Root, as the long and the round, but they are both the Roots of the same Plant, the Body of which is round, and the Protuberances, or Ramifications long. The Plant they belong to is a Kind of *Colchicum*, describ'd by *Herman* in the *Paradisus Batavus*.

The first is thus distinguish'd *Zedoaria longa*, Offic. C. B. P. *Geidwar* aut *Geidwar*, Ger. Emac. *Zedoaria Zeylanica Camphoram redolens*, Boerh. Ind. Alt. Long Zedoary. It is brought to us from the *East-Indies*. It is reckon'd attenuant, detergent, emmenagogue, carminative, anthelmintic, cordial, alexipharmic, stomachic, diuretic, heating and drying. It discusses Flatulences, and is principally used in Pains of the Colic, and of the Stomach: It cures the Bites of venomous Animals, stops a Lientery, represses Vomiting, provokes the *Menses*, and kills all manner of *Tineæ* infesting the Belly. The Dose is from five Grains, to half a Dram in Substance, and it may be used in Infusion like Tea. Some correct *Opium* with this Root.

The second is distinguish'd thus, *Zedoaria rotunda*, Offic. C. B. P. *Malankua*, Hort. Mal. Round Zedoary. This is also brought from the *East-Indies*, and agrees in Virtues with the preceding, but is seldom to be met with in our Shops. This Species, cut into Slices, dry'd, and preserv'd in Sugar, is more excellent and commodious for Use than Ginger.

Another Species of Zedoary, is the *Zerumbet*, Offic. Garz. *Zinziber latifolium sylvestre*, Comm. Hort. Amst. *Kua*, Hort. Mal. *Walingburu*, Herm. Mus. *Zeyl. Zerumbeth*. It grows spontaneously in the Kingdom of *Malabar*, but is not to be met with in our Shops. It agrees in Virtues with the long Zedoary.

Zeopyrum. This is already specify'd under the Article *Triticum*.

Zingi, *Anisum Indicum*, Offic. *Anisum peregrinum*, C. B. P. Indian Anise. The Kernel of this Fruit, which is brought from the *East Indies*, is good for the Colic.

Zingiber, Offic. C. B. P. *Zinziber*, Ger. Emac. Ginger. It is brought from *Calecut* in the *East-Indies* principally, but it is now cultivated in *Jamaica* and *Barbadoes*, from whence we are supply'd with it, either preserv'd or dry'd. It heats powerfully, opens, incides, and attenuates, and discusses Flatulencies in the *Primæ Viæ*. It is esteem'd beneficial to the Stomach, *Thorax*, and all the *Viscera*. It excites an Appetite, and resists Putrefaction and Malignity.

Zizyphus. The Jujube. See *Jujaba*.

VEGETABLES Omitted.

ABSINTHIUM *Scrip-
tum Gallicum*, Offic. C.
B. P. French Sea Worm-
wood. It grows about the
Sea Shore of France and England.
The Herb is used, which agrees in
Virtues with the common Worm-
wood.

Absinthium Santonicum, Offic. *Ab-
sinthium Santonicum Gallicum*, C. B.
French Worm Seed. This is brought
from Provence in France. The Herb
is used, which agrees in Virtues with
the *Absinthium Scrip-
tum*.

Absinthium Santonicum Judaicum,
C. B. P. *Lumbricorum Semen Rau-
wolfia*, J. B. Arabian Wormseed.
It is brought from Judæa to Alexan-
dria, and is said by some, to be pos-
sessed of the same Virtues with the
common Wormwood.

Acer, Offic. *Acer campestre* & *mi-
nus*, C. B. P. The Maple. It grows
in Hedges, flowering in May. The
Root is used, which infused in Wine,
is with great Success applied in Pains
of the Liver.

Acer majus, Offic. *Acer montanum
candidum*, C. B. P. The great Ma-
ple. It grows in Walks, and Church-
yards, flowering in May, and the
Fruit is ripe in September. The Juice
that distils from the wounded Tree is
used in Medicine, and is supposed to
be beneficial in scorbutic Disorders.
In the Beginning of Spring, when
the new Buds swell with Juice, the
Tree wounded in the Trunk, Bran-
ches, or Roots, yields a sweet and
potable Liquor in Abundance, as the
Birch does. Some use it for their

ordinary Drink. The Inhabitants of
Canada make a Sugar out of the
Juice of this Tree.

Adiantum album, *folio Filicis*,
J. B. *Dryopteris alba*, Park. Theat.
White Oak Fern. It grows in moun-
tainous and rocky Places. The
Herb is used, which agrees in Vir-
tues with the common *Adiantum*, to
which it is a *Succedaneum*.

Agnus Scythicus, Offic. *Agnus Scy-
thicus Borometz*, J. B. *Frutex Tartar-
icus*, C. B. P. The Scythian, or Tar-
tarian Lamb. This is brought from
China and Tartary. The Down of
this Plant, call'd *Poco Sempie*, Offic.
Golden Moss, is used, which is re-
commended for spitting of Blood, in
a Dose of six Grains; and three Do-
ses are said to perform a Cure. The
Chinese frequently apply it to recent
Wounds, in order to stop the Bleed-
ing. Many fabulous Stories are re-
lated of this Plant, as that it is a
Zoophyte, and feeds upon Grass, and
other Circumstances equally ridicu-
lous; but the Truth is, that 'tis only
a Kind of arborescent Fern, made
artificially, so as to have some Re-
semblance to a Lamb, in order to a-
muse the Credulous, and surprize the
Unwary.

Alcyonium. Bastard Sponge. This
is a Sort of spungy Plant, which is
found in the Sea, or upon the Shore,
or rather a Froth of the Sea, which
is hardened by the Heat of the Sun,
and of different Shapes and Colours.
What those Bodies are which the
Greeks call *Alcyonia*, and whence they
have their Original, has been a con-
troverted

troverted Point among the Botanists, and is not yet decided. *Pliny* writes that they are the Nests of some Sort of Bird, that build in the Sea. *Imperatus* would have them to be nothing but Bits of Straws and Hair, conglobated into a Mass by the Agitation of the Waters. *Schrochius* affirms, they are produced by Reeds, and their Leaves, and that in several which he cut open, he found the very Plant, the Reed, rolled up and inclosed in the Middle.

Alcyonium durum, Offic. *Alcyonium spongiosum* Officinarum, J. B. Hard Bastard Sponge. The whole Plant is used, and is recommended for the *Erysipelas*, the Ring Worms, the Itch, the Leprosy, and all other cutaneous Disorders, and to take away Freckles from the Face, being externally applied in Powder, or in Decoction.

Alcyonium stipposum, Offic. *Alcyonium stipposum Imperati*, J. B. Thready Bastard Sponge. The whole Plant is used, which is resolvent, and agrees in Virtues with the preceeding.

Alcyonium tuberosum, Offic. J. B. Tuberosc Bastard Sponge. The whole Plant is used, which is proper to clean the Teeth, and if it is calcined with Salt, it makes a Depilatory, or Remedy to destroy Hair.

Alcyonium vermiculatum, Offic. J. B. *Alcyonium vermiculare Imperati*, C. B. P. Vermiculate Bastard Sponge. The whole Plant is used, which is esteemed good to excite Urine: to expel the Stone of the Kidneys and Bladder; to remove Obstructions of the Spleen, and for the Dropsy; it may be taken in Powder, or in Decoction. Being burnt it makes the Hair grow, if applied to the Part, mixed with a little Wine.

All the *Alcyonia* are deterfive and discussive, and of an acrid Quality.

Alga, Offic. *Alga angustifolia virariorum*, J. B. Grais Wrack. It grows in several Places about the

Sea Shore. The Herb is used, which is aperitive, refrigerating, desiccative, and vulnerary, and is esteemed good for the Gout, and Inflammations, and to kill Lice and Fleas.

Aloides, *Aloe palustris*, Offic. C. B. P. *Aloe fave Aizoon palustre*, J. B. Water Aloes, or Fresh Water Soldier. It grows in moist Ditches, flowering in June. The Herb is used, which is esteemed vulnerary.

Ambrosia campestris, Offic. *Ambrosia campestris repens*, C. B. P. *Coronopus Ruellii*, seu *Nasturtium verrucosum*, J. B. Swine's Cresses. It grows among Rubbish, flowering in June. The Herb is used, which agrees in Virtues with the *Nasturtium*.

Anchusa lutea, Offic. *Anchusa lutea major*, C. B. P. Yellow Alkanet. It grows in Germany and France, flowering in June. The Root is used, but is seldom to be met with in our Shops. According to *Dioscorides*, it destroys flat Worms, if taken with Hyssop and Garden Cresses.

Angsana, Offic. *Draco Arbor Indica siliquosa*, *Populi-folio*, *Angsana* sel *Angsava Javanica*, Commel. Hort. Amst. It grows in the East-Indies. The Part used in Medicine is the Liquor which distils from the wounded Tree, and condenses into a red Tear, wrapt in thin, reedy Coverings, as sold in the Shops. The Gum of this Tree, as the very learned and ingenious *Commelin* says, is sold in the Shops for *Sanguis Draconis*. Hence I cannot but observe, that either our Botanical Authors are at a great Loss, and in much Confusion and Perplexity, about what Kind of Tree this should be, or else there are several Sorts of Trees which produce this Gum. It is esteem'd an Astringent, and an excellent Remedy in *Aphthæ*.

Apium Pyrenaicum Thapsiæ facie, Tourn. Inst. *Seseli Pyrenaicum Thapsiæ folio*, Raii Hist. Mountain Parsley, or the second Bastard Turbith.

It grows on the *Pyrenean Mountains*, and the Root is used, which serves the *Spaniards* instead of the Root *Turbith*, but it is of a noxious Quality.

Arbor Saponaria, Offic. *Saponaria sphaerula arboris filici-folia*, J. B. *Nucula Saponaria non edules*, C. B. *P. Bacca Bermudenses*, Marl. Obf. Soap Berries. It grows in *Jamaica*, and other Parts of the *West Indies*; the Fruit is ripe in *October*, and when dry, is spherical, of a reddish Colour, and less than a Gall; of a large Eye, and a bitter Taste, but no Smell, containing one round black Stone. It is greatly recommended against the *Chlorosis*, and the Berries are reckon'd a singular and specific Remedy against that Distemper, working a perfect Cure, after an ineffectual Use of *Chalybeates*. The Spirit, Tincture, or Extract, are more proper to be used than the crude Berries.

Arbutus, Offic. *Arbutus Comarus Theophrasti*, J. B. The Strawberry Tree. It grows in Woods and Thickets. The Fruit is used, which is of a sharp, and austere Nature, hurtful to the Stomach, and causes Head-Achs. *Amatus Lusitanus* informs us, that they distil a Water from the Leaves and Flowers of this Tree, which is esteem'd a sacred Preservative and Antidote against the Plague and Poisons.

Arbutus folio non serrato, C. B. P. *Adrachne*, Offic. *Adrachne Theophrasti*, J. B. The Strawberry Bay. It grows in *Greece*, and the Fruit is used, which agrees in Virtues with the preceding.

Aria, Offic. *Aria Theophrasti*, Ger. *Emac. Sorbus Alpina*, J. B. The White Boam Tree. It grows in Woods, and upon rocky Mountains, flowering in *April*. The Fruit, which is the Part used, is recommended for mitigating Coughs, and promoting Expectoration.

Arnica, Offic. *Doronicum Germanicum foliis semper ex adverso nascentibus villosis*, J. B. German Leopard's Bane. It grows in mountainous Places, flowering in Summer. The whole Plant is used, which is heating and drying, and of fine Parts. It is diuretic, sudorific, and sometimes a little emetic, and is found by frequent Experience to be a Discussive and Vulnerary, and is accounted the very best and only *Panacea*, for such as have hurt themselves by Falls from high Places. The Country People use it instead of *Hellebore*, for the Murrain in Cattle.

Atriplex sylvestris, Offic. J. B. *Chenopodium folio laciniato coma purpurascente*, Tourn. Inst. Wild Orache. It grows upon Dunghills, flowering in the Summer. The Herb and Seeds are used, which are said to be emollient, and either raw or boil'd, are said to discuss Boils. The Seeds taken in *Hydromel*, cure the Jaundice.

Baccharis, Offic. *Conyza major Matthioli*, *Baccharis quibusdam*, J. B. Plowman's Spikenard. It grows in dry mountainous Places, flowering in *Autumn*. The Leaves and Root are used. The Leaves are astringent, and are good for the Head-ach, Erysipelas, and Inflammations of the Eyes, being made into a Cataplasm; the Smell of them provokes Sleep. The Root boiled in Water, is effectual in Convulsions, Ruptures, Falls, Difficulty of Breathing, old Coughs, and a Difficulty of Urine, it provokes the *Menses*, and given in Wine, is good against the Bites of venomous Creatures.

Bamia Moschata, Offic. *Alcea Aegyptiaca villosa*, C. B. P. *Mosch*, id est *Bamia Moschata*, Alpin. Exot. Mosch Seed. It grows in *Egypt*. The Seeds are used, which are of a smutty Colour, Kidney like, and of a very

a very fragrant Smell, like Musk. The Egyptians dry them slightly, and mix the Powder in their Coffee, to make it more effectual for the strengthening of the Head, Stomach and Heart. We use it in Fumigations.

Batatas, Offic. C. B. P. J. B. *Battatas Occidentalis Indiæ*, Park. Theat. Spanish Potatoes. They grow spontaneously in both the Indies. They are used either boiled, or roasted under Ashes, for loosening the Belly. They are of a fine Taste, and by some preferred to our Turneps. If they are taken new, and bruised and macerated with a little Water, they ferment of their own Accord, and produce a Drink used by the Inhabitants of *Brasil*.

Bifolium, Offic. *Bifolium majus*, seu *Ophris major quibusdam*, J. B. *Ophris bifolia*, C. B. P. Tway-blade. It grows in Woods and Thickets, flowering in May and June. The Herb is used, which is astringent and agglutinating, good to consolidate Ruptures, and heal Wounds, tho' it is seldom used.

Blattaria, Offic. *Blattaria lutea*, J. B. Moth Mullein. It grows by the Sides of Paths, flowering in July. The Herb is used, which agrees in Virtues with the *Verbascum*, or common Mullein.

Blitum album minus, C. B. P. *Blitum sylvestre spicatum*, Tourn. Inst. Small White Blite. It grows in Gardens, and the Herb is used, which is refrigerating, moistening, and emollient.

Brassica sylvestris, Offic. *Brassica maritima monospermos*, C. B. P. *Crambe maritima Brassicæ folio*, Tourn. Inst. Sea Cole wort. It grows in sandy Places about the Sea Shore, flowering in July. The Leaves are used, which are good to heal Wounds, and discuss inflammatory and other Tumors. This Cole wort is used as an Aliment, like other

Cabbage, when very young, but is esteem'd more hot and dry.

Bunium, Offic. *Daucus Petroselinæ vel Coriandri folio*, C. B. P. Wild Parsley. It grows in stony and rocky Places, flowering in the Summer. The Herb is used, which is diuretic, heating, and brings away the After Birth: It is good for the Spleen, Kidneys and Bladder.

Cancamum, Offic. C. B. P. This is the Tear of an Arabian Tree, in some measure resembling Myrrh, of a very unfavoury Taste, and used in Suffumigations. At present we know not what the *Cancamum* was. Some take it for the *Lacca*. *Matthiolum* asserts the *Cancamum* of the Greeks, and the *Lacca* of the Arabians, to be the same Thing; in which, says the learned Ray, he is mistaken; for their Virtues are different. Others will have it to be the *Benzoin*; *Garcias* and *Amatus* affirm it to be the *Gum Anime*, so that, it seems none can be sure what it is. *Dioscorides* says it is endued with the Virtue of extenuating immoderately fat Bodies, if half a Dram of it be taken in Water, or *Oxymel*, every Day for a considerable Time. It is prescrib'd in Disorders of the Spleen, for the Epilepsy, and the *Asthma*; and, taken in *Hydromel*, it provokes the *Menses*. Macerated in Wine, it speedily exterges Cicatrices in the Eyes, and helps Dimness of Sight, and is as good a Remedy as any for putrid Gums, and the Tooth-ach.

Cardaminum majus, Rupp. Flor. Jen. *Acrisviola maxima odorata*, Boerh. Ind. Alt. The great, or sweet Indian Cress. It is cultivated with us in Gardens, flowering in the Summer. It agrees in Virtues with the *Nasturtium Indicum*.

Carlina caulifera, J. B. *Carlina caulescens magno flore*, C. B. P. Carlina Thistle with a Stalk. It grows in Gardens. The Root is used, which

which agrees in Virtues with the *Carlina*, or common Carline Thistle.

Carlina sylvestris, Offic. *Carlina sylvestris quibusdam, aliis Atractylis*, J. B. *Enicis sylvestris spinosior*, C. B. P. Common wild Carline Thistle. It grows in dry Pastures, flowering in *July* and *August*. The Herb is used, and is recommended by *Wedelius* for the Head-ach, and in other Respects agrees with the *Carlina*, or common Carline Thistle.

Caucalis, Offic. *Caucalis lato Apii folio*, C. B. P. *Lappula canaria latifolia sive Caulalis*, J. B. Bastard Parsley. It grows in Fields, flowering in *June* and *July*. The Herb is used, and either eaten raw, or boil'd as a Pot Herb, is recommended by *Dioscorides* to provoke Urine.

Caucalis semine aspero, C. B. P. *Pseudo-Selinum*, Offic. *Anthriscus quorundam semine aspero hispido*, J. B. Hedge Parsley. It grows in Hedges and Thickets, flowering in *July* and *August*. The Seed is used, which provokes Urine and the *Menses*.

Cepa ascalonica, Offic. *Cepa sterilis*, C. B. P. Barren Onions, Eschalots. It is cultivated in Gardens for culinary Uses. The Root is used, which is heating, drying, inciding, aperient, and provocative. It excites an Appetite, and destroys Worms in the Intestines.

Cevadilla, Offic. *Cevadilla sive Hordeolum causticum Americanum*, Park. Theat. *Hordeum causticum*, C. B. P. Indian caustic Barley. It is imported from *Mexico*. The Seeds of this Plant are so extremely burning and caustic, that they may be used in Gangrenes and putrid Ulcers, instead of the actual Cautery or Sublimate. The Seed powder'd, and sprinkled in Ulcers kills Worms, which sometimes breed therein, and cleanses them.

Chærofolium, Offic. *Chærophylllum fativum*, C. B. P. *Chærephyllon*, J. B. Chervil. It grows in Gardens, flowering in *May*. The Leaves and Seeds are used. Chervil is diuretic, emmenagogue and lithontriptic, and is of fine Parts; it resolves coagulated Blood, and induces Sleep. It is used in Broths with good Effect, as a Promoter of Expectoration in an *Asthma*, and externally it is of great Use in the Colic, and in a Retention of Urine.

Chrysanthemum, Offic. *Chrysanthemum foliis Matricariæ*, C. B. *Dioscorides's Corn Marygold*. It is cultivated, tho' but seldom, in Gardens, flowering in the Summer. The Flowers are used, and being bruised with Cerate, are said to disperse a *Steatoma*.

Chrysanthemum segetum, Ger. Emac. *Bellis lutea foliis profunde incis majus*, C. B. P. Corn Marygold. It is frequently found among Corn. The Flowers are used, which are extoll'd by the *Germans*, as an extraordinary Remedy for the Yellow Jaundice.

Cicutaria vulgaris, Offic. *Cicutaria alba Lugdunensis*, Ger. Emac. *Myrrhis sylvestris seminibus lævibus*, C. B. P. Wild Cicely, Cow Weed. It grows frequently in Hedges, flowering in *May*. The Herb is used, *Tragus* being persuaded it was the *Myrrhis* of *Dioscorides*, advised the Use of it for the Suppression of the Terms; but *J. Baubine* relates a melancholy Story of two Families, that had eaten the Roots of this Plant instead of those of Parsnips. They cause Difficulty of Breathing, Torpor, and Madness.

Cirsium, Offic. *Cirsium foliis non hirsutis*, Ger. Emac. Melancholy Thistle. It grows in several Places about *Montpelier*, flowering in *June*. The Root is used, which according to *Andreas* eases the Pains of *Varices*, if bound to the Part affected.

Cistus Hypocistidem ferens, Offic. *Cistus mas folio oblonge, incano*, C. B. P. *Cistus* with the *Hippocistis*. It grows on Rocks, Hills, and in Woods, and flowers in the Summer. The *Hypocistis*, which adheres to the Tops of the Clads about the Root, is used in Medicine. See *Hypocistis*.

Cistus fœmina, Offic. *Cistus fœmina folio salvia*, C. B. P. Female Holly Rose. It is cultivated in Gardens, flowering in the Summer. The Leaves and Flowers are used, which agree in Virtues with the following.

Cistus mas, Offic. *Cistus mas folio rotundo, birsutissimo*, C. B. P. Male Holly Rose. It grows spontaneously in Italy and Spain, but is cultivated with us in Gardens, flowering in the Summer. The Leaves, and Flowers are used. The Plant is of an astringent Quality; for which Reason, the Flowers bruised, and drank twice a Day in austere Wine, cure the Dysentery; made into a Cataplasim by themselves, they restrain *Noma*, or spreading Ulcers; and in a Cerate, they heal Ambustions, and old Ulcers of the Mouth.

Another Species of *Cistus*, is the *Cistus, Ledon foliis Rosmarini ferrugineis*, C. B. P. *Rosmarinus sylvestris quorundam*, J. B. Bohemian Rosemary. It grows in Woods, flowering in July. The Herb is used, which is of an inebriating Quality; for which Reason, in many Places of Saxony, they boil it in their Beer, to make the Peasants drunk the sooner, whose Heads, when they have drank freely of this good Liquor, are affected with it for some Days afterwards: They lay it also among Cloaths to expel Moths.

Conyza, Offic. Germ. *Conyza cærulea acris*, C. B. *Senecio sive Erigeron cæruleus*, aliis *Conyza cærulea*, J. B. Blue Fleabane. It grows in barren Pastures, and flowers in July and August. The Herb is used,

which is said to accelerate Suppuration.

Culitlawvan, Mont. Exot. This is a hot aromatic Bark, and said to be found in New Guinea, but a Stranger in the European Shops. It is said to agree in Virtues with the *Cortex Massoy*.

Diospyrus, Offic. J. B. *Mespilus Alni effigie, lanato folio minor*, C. B. P. *Vaccinia alba*, Ger. Emac. White Whortles. They grow on Mountains, and on hilly Places. The Fruit is used, which agrees in Virtues with the *Aria*.

Heliochrysum, Offic. *Heliochrysum quorundam, foliis Abrotani*, J. B. Golden Cudweed. It is cultivated with us in Gardens, flowering in July. The Herb is used. It is recommended against the Bites of Serpents, and in Pains of the Hips, and Strangury. It is said to provoke the *Menses*, dissolve concremented Blood, and stop Catarrhs.

Helxine cissampelos, Offic. *Helxine cissampelos multis, sive Convolvulus minor*, J. B. *Smilax lævis minor*, Ger. Emac. Small Bindweed. It grows in Fields, flowering in June. The Herb is used, which being externally apply'd, is a good Vulnerary. The Juice of the Leaves, taken inwardly, is a good Cathartic.

Herba Vulneraria, seu Virga aurea vulgo Germanica, Offic. *Conyza affinis Germanica*, J. B. German Golden Rod. It grows on mountainous Places, flowering in July. The Herb is used, and agrees in Virtues with the *Virga aurea*; for which it is sold in the Shops of Germany.

Hordeum mundatum & perlatum, Offic. French, or Pearl Barley. What we call French Barley, because it is usually imported from France, is nothing but Barley decorticated in a Mill, adapted to that Purpose. What we call Pearl Barley, because it resembles Scots Pearls, is prepar'd after the same Manner; only is twice

twice or thrice subjected to the Mill, in Order to be ground, and made less. Both of them agree in Virtues with common Barley, only are more nutritive.

Jacobæa alpina, *sive Achyllea*, Cod. Med. *Chrysanthemum alpinum foliis Abrotani multifidis*, C. B. P. Five-leaved Mountain Rag-wort. It is cultivated with us in the Gardens of the Curious. The Leaves are used, which taken in Ptisan, or made into Tea, are recommended for an Asthma.

Iberis, Offic. J. B. *Iberis latiore folio*, C. B. P. Sciatica Cresses. They grow in Botanic Gardens, and resemble Garden Cresses in Smell, Taste, and Virtues, only they are less drying.

Laburnum, Offic. *Laburnum trifolium Anagyridi simile*, J. B. Bean Trefoil Tree. It grows upon Mountains, flowering in June and July. The Leaves and Seeds are used, which purge both upwards and downwards. The Leaves discuss Tumors; and the Decoction provokes Urine.

Libanotis altera, Offic. *Libanotis Faniculi folio, semine foliaceo*, C. B. P. Candy All-heal. It grows in the

Island of *Crete*, flowering in the Summer. The Root, Herb, and Seeds are used. The Herb, bruised and apply'd, stops the Bleeding of the *Hæmorrhoids*, mitigates Inflammations of the Parts about the *Anus*, and *Condylomas*. The Roots dried, cleanse Ulcers, and provoke Urine and the *Menses*; the Seeds drank, have the same Effects.

Lichen marinus, Offic. *Lactuca marina, sive Intybacea*, J. B. Oyfter Green. This grows upon Oysters, and upon Rocks. The Herb is used, which agrees in Virtues with the *Alga*.

Ornithogalon, Offic. *Ornithogalon vulgare & verius*, J. B. Star of Bethlehem. It is cultivated in Gardens, flowering in May. The Roots and Seeds are used; the first of which are eaten either raw or boil'd, and the other is baked in Bread.

Pinguicula, Offic. *Pinguicula Gessneri*, J. B. Butter-wort. It grows in moist mountainous Places, flowering in May. The Herb is used, which is vulnerary, and good for *Hernias* in Children. A Syrup is prepar'd from it, which purges Phlegm very briskly.

C H A P. II.

Of A N I M A L S.

ACCIPITER, Offic. *Accipiter Fringillarius*, Gefn. de Avib. The Sparrow Hawk. The whole Bird, its Fat, and Excrements are used. Oil wherein a Hawk has been boiled, is said to cure Distempers of the Eyes, if they are anointed with it. The same Virtue is in the Fat. The same Oil cures all Deformities of the Skin. The Excrements are of so heating a Quality, that *Galen* will not admit them as Part of the *Materia Medica*; but there are some who use them in Disorders of the Eyes; others however, advise them in Order to promote Delivery, taken inwardly, or by Way of Suffumigation. *Hippocrates* and *Pliny* prescribe them against Barrenness.

Acus, *Aristot.* *Aldrov.* de Pisc. *Petimbubaba*, *Charlt.* Pisc. The Tobacco Pipe Fish. It is found in the *Adriatic Sea*, or Gulph of *Venice*. *Galen* recommends the Ashes of this Fish, drank in some convenient Vehicle, for the Strangury.

Agnus. See *Ovis*.

Alauda cristata, *Schrod.* *Galerita*, Offic. *Alauda cristata major*, *Raii Synop.* The Crested Lark. The whole Bird, its Heart, and Blood, are used. The Heart and the Blood of Larks, are good for the windy Colic, and to extricate Gravel and Phlegm from the Kidneys and Bladder. The fresh Blood, taken in sharp Vinegar, or warm Wine, effectually relieves the Stone

and Gravel. As the Lark uses much Exercise, its volatile Salts must be much exalted, and its Juices alkaliescent, especially as it feeds sometimes on Insects.

Alauda non cristata, *Schrod.* *Alauda*, Offic. *Mer. Pin.* The Sky Lark. The whole Bird, and its Blood are used, and agree in Virtues with the preceeding.

Album Græcum. See *Canis*.

Alce, Offic. *Schrod.* The Elk. The Parts used in Medicine, are the Hoofs, and the Nerves. The Hoof is esteemed a Specific against the Epilepsy. apply'd either externally, or internally. Internally the Raspings are taken. Externally a Bit of the Hoof is included in a Ring, and worn superstitiously on the Finger, which is next to the little one, in such a Manner that the Portion of the Hoof may be next to the Palm. Sometimes the Hoof is held in the Hand, apply'd to the Pulse, put into the left Ear, or suspended about the Neck, in such a Manner, that it may touch the Skin. The Nerves are bound about those Limbs, which are most subject to Spasms. It seems the Elk is an Animal much subject to epileptic Disorders, and it has been observ'd, that it frequently scratches its Head with the hind Feet, which was whimsically apprehended to be done, as a Remedy for the above-mention'd Distemper. Hence the Hoof acquir'd its Reputation as a Medicine, but I am afraid no great Dependence can be had upon it.

Alcedo, a Name for the *Ispida*, or King's Fisher.

Anas, Offic. *Anas domestica*, Aldrov. de Ornith. The Duck or Drake. The whole Duck alive, the Fat, Blood, and Dung, are used. A living Duck, stript Part of it bare of Feathers, and apply'd to the Belly, eases the Pain of the Colic. It is useful in external and internal Pains, as of the Sides, Joints, and in a cold Distemperature of the Nerves. The Blood is an Alexipharmic, and therefore sometimes used in Antidotes. The Dung is apply'd to the Bites of venomous Creatures.

Anas sylvestris, Offic. Schrod. *Boscas major*, Raii Ornith. The wild Duck, and Malard. The Fat, Blood, and Dung, are used, and agree in Virtues with the preceeding.

Anguilla, Offic. Aldrov. de Pisc. The Eel. The Fat is used, which is vulnerary, generates Hairs, is of Service in an *Alopecia*, cures Deafness, being put into the Ears, and mitigates the Hæmorrhoids.

Anguis. The Snake. See *Serpens*.

Anser, Offic. The Goose. The Fat, Blood, Dung, and Cuticle of the Feet is used in Medicine. The Fat is esteem'd to be more hot, subtiler, penetrating, and resolvent, than that of the Swine, and is sometimes injected by Way of Clyster in Erosions of the Intestines; it cures Baldness of the Head; Fissures of the Lips, Ringings of the Ears, mollifies rigid Tendons, and relaxes the Belly, especially in Children. The Blood is alexipharmic. The Dung violently heats and dries, incises and opens, and powerfully provokes the *Menses*, and Urine, and expels the Secundines. It is much used in the Jaundice, Dropsy, and Scurvy. The Sportsmen are of Opinion, that when a Kennel is affected with Madness, the only Way

to remedy this Evil is, to let a Flock of Geese lie in it every Night for a considerable Time, and I have some Reason to believe, that this Observation is not without Foundation. The Cuticle of the Feet dry'd and powder'd, is said to be astringent, and is sometimes used in immoderate Fluxes of the *Menses*, and is esteem'd a good Application for Chilblains.

Anser ferus, Offic. The wild Goose. It is found about the Sea Coasts, and agrees in Virtues with the preceeding.

Antilopus, Offic. *Capra strepsiceros*, Aldrov. de Quad. The Antelope. It is an African Beast like a Deer, and remarkable for its Swiftmess. Its Hoofs and Horns are used, which are esteem'd anti-epileptic, and antihysteric.

Aper. The Boar. See *Porcus*.

Apes, Offic. Bees. The Bees themselves, their Honey, the Wax, and *Propolis*, or Bee Glue, are used in Medicine. The Salts of Bees are very volatile, and highly exalted; for this Reason, when dry'd, powder'd, and taken internally, they are diuretic, and diaphoretic. If this Powder is mixed in Unguents, with which the Head is anointed, it is said to cure the *Alopecia*, and to contribute to the Growth of Hair upon bald Places. Honey will taste of the Plant, from whence it is gather'd, as *Dioscorides* remarks with respect to the Sardinian Honey. And the Honey collected from the *Chamaerodendros Pontica, maxima, Mespile folio, flore luteo*, which *Tournefort* takes to be the *Ægolethron* of *Pliny*, has been remark'd in all Ages to be poisonous. Honey is very penetrating and deterging, and is therefore good in all Obstructions, especially from viscid and tough Humours. In Infarctions and stuffing of the Breast, it is of great Efficacy, and wonderfully promotes Expectoration. In short, there is no Disorder from Phlegm, or any thing which

which is the Produce of a cold Constitution, in which it is not serviceable. But in thin and hot Habits it is not good. It was antiently used as Sugar is now; and great Pity it is, that it is not at present more used. It does great Service to such as are troubled in a Morning with thick tough Phlegm, with which they cannot be easy, until it is hawk'd up, tho' it gives much Difficulty and Straining to do it. For this Purpose it is very conveniently eat over Night upon a Toast, or dissolved in any warm Liquor. Some affirm it will destroy Worms, drank in Milk. It has been much used in Surgery to cleanse foul Ulcers, either by immediate Application, or washing them with Liquors in which it had been dissolved. It is remarkable that Honey was used by the Antients, in the Composition of their Antidotes and *Theriacas*, as in Mithridate, the *Theriaca Andromachi*, commonly called *Venice Treacle*; and *Fracastrorius* has follow'd their Example, in the Composition of his Confection, called *Diascordium*. Now, Honey, I apprehend to be a very proper Ingredient in such Compositions: For it opens the other Ingredients by fermenting; extracts, and in some Degree, alters their Virtues, and unites them in one common Efficacy. Besides, Opium, and other Narcotics, which are frequently directed in the Antidotes of the Ancients, are corrected by Honey; agreeable to which, is the Remark of *Dioscorides*, that Honey relieves the Disorders excited by taking the Juice of the Poppy. When, therefore, we make any of these Antidotes with *Diascordium*, a Medicine results from the Composition, of Virtues very different from those of one which is made with Honey. And this deserves the serious Consideration of Physicians who prescribe *Diascordium*, or any of the other Antidotes made with *Diascordi-*

um. With Respect to Honey, one farther Remark is to be made, which is, that there is a Peculiarity in some Constitutions, which renders them incapable of bearing the least Quantity of Honey, without excessive Gripes, Vomiting, and Uneasiness. And in others, it operates as a Poison; an Instance of which we find in the Philosophical Transactions. Certain Balsams appear (says *Boerhaave*) in a very small Quantity, upon the Surface of the Leaves of some Plants, where they are inspissated by the Heat of the Sun, as seems manifestly to appear in Rosemary: There are also found in other Plants certain very minute Globules, rising from the open seminal Tufts in the main Part of the Flower. These can scarce be collected by any human Means; but I have sometimes found, upon frequently cohobating Spirit of Wine upon Rosemary Leaves, an unexpected and ungrateful Taste or Smell of Wax, fouling the Spirit, which before was good; and upon viewing these Leaves with a Microscope, I thought I discover'd little waxy Rifings on the Surface; and upon handling them considerably, I evidently found Wax gradually sticking to my Fingers. Wax, therefore, appears to be a certain Species of Turpentine, which the fat Juices of Plants, when heated by the Sun, sweat out upon the Surface, or produce within the Cavities of the flowery Tufts. This the Bees collect, roll up into little Balls, and carry between their hind Feet to their Hives, where it is wrought into the Cells of their Combs; and from hence, after the Honey is separated from the droffy Parts, it is procur'd for human Uses. It is generally yellow, and not ungrateful either in Taste or Smell. It becomes hard, and almost brittle, in the Cold, but grows soft, and dissolves with Heat. Wax is heating, mollifying, and moderately incarna-

ning. It is mix'd in forbile Liquors, as an efficacious Remedy for a Dysentery, and is recommended to prevent the Curdling of Milk in the Breasts of Nurses. The white Wax is nothing but the yellow Wax, whiten'd by frequent Insolation. The *Propolis*, or Bee Glue, is a rude Wax-like, and thick Matter, or Grew, found in the Entrance of Bee Hives. It is gently heating, abstergent, and attracting: It softens indurated Parts, alleviates Pains, and induces Cicatrices on Ulcers.

Apos, Offic. *Hirundo Apus*, Raii Ornith. The Black Martin, or Swift. It lives with us in England during the Summer. The whole Bird is used, which taken in Wine cures the Gripes.

Aquila, Offic. *Chryseatos*, Aldrov. Ornith. The Eagle. The Gall and Dung are used. The Gall distill'd with Oil of Violets, is recommended by *Avicenna* for Pains and Ringings in the Ears; and the Dung against Abortions.

Araneus, Offic. The Spider. Both the Spider and its Web are used. The Spider is said to avert the Paroxysms of Fevers, if it be apply'd to the Pulse of the Wrist, or the Temples; but is peculiarly recommended against a Quartan, being inclosed in the Shell of a Hazle Nut. The Web astringes and conglutinates, and is therefore vulnerary, restrains Bleeding, and prevents an Inflammation. The Country People have a Tradition, that a small Quantity of Spider's Web, given about an Hour before the Fit of an Ague, and repeated immediately before it, is effectual in curing that troublesome, and sometimes obstinate Distemper. This Remedy is not confin'd to our own Country; for I am well inform'd, that the *Indians* about *North Carolina* have great Dependance on this Remedy for Agues, to which they are much subject; and I am acquainted

with a Gentleman long resident in those Parts, who assures me he was himself cured by it of that Distemper. And indeed Experience confirms the Efficacy of this Medicine in the Cure of Agues.

Araneus niger, Offic. The Black Spider. It is common in Woods, Thickets and Pastures. Among the approved Remedies of Sir *Matthew Lister*, I find, that the distill'd Water of Black Spiders is an excellent Cure for Wounds, and that this was one of the choice Secrets of Sir *Walter Raleigh*.

Ardea, Offic. The Heron. The Fat of this Bird is recommended to assuage the Pains of the Gout; for taking off Specks from the Eyes, and clearing the Sight; and for curing Deafness, if put into the Ear. The young Herons are sometimes used as Food; but on Account of their Aliment, which is Fish, their Salts must be highly exalted, and their Flesh rank.

Ardea Stellaris, Raii Ornith. *Asterias*, Offic. The Bittern, or Mire Drum. The Skin and Feathers of this Bird, if burnt, are said to stop Hæmorrhages.

Aries. The Ram. See *Ovis*.

Aschia & *Thymallus*, Offic. The Grayling, or Umber. This Fish resides in rapid, shallow, and stony Streams, and is esteem'd excellent Food. The Part used in Medicine is the Fat, which is said to take away Specks and Pearls from the Eye: Melted in the Sun, and mixed with Honey, it takes away Freckles, and Marks left by the Small Pox.

Aselli. Wood Lice. See *Millepedes*.

Asellus, Offic. The Cod Fish, or Keeling. Certain small Bones, found in the Head of this Fish, called *Lapides Dentales* in the Shops, are used in Medicine. They are merely testaceous, and employ'd as such.

Asellus minor, Aldrov. de Pisc. Onif-

Oniscus, Offic. The Whiting. The Flesh and Gall are used. The Flesh is esteem'd very wholesome Food, and the Gall is recommended in a *Phthisis*.

Asinus, Offic. The Ass. The Hoof, Blood, Milk, Urine and Dung are used in Medicine. The Hoof is recommended in an Epilepsy, like that of the Elk; and the Ashes of it, us'd externally, are esteem'd good for discussing stumous Swellings, and Impoſthumations, for curing Chilblains, and Cracks of the Skin, for removing Films of the Eye, for expelling a dead *Fœtus*, and for rowzing Epileptic and Hysteric Patients out of their Fits. The Blood is said to be sudorific; and that of a young Ass to cure the Jaundice. Asses Milk is very nourishing, and abstergent, and is therefore esteem'd good in a Consumption, in Disorders of the Stomach, Abscesses of the Kidneys, the Stone in the Bladder, and Arthritic Pains. It is esteem'd gently cathartic, and was frequently directed by *Hippocrates* as a Purge in large Quantities. As a Topic, it makes the Gums firm, eases Arthritic Pains, and gives the Face an agreeable Whiteness, if wash'd with it. The Urine is said to be a powerful Remedy in Disorders of the Kidneys; cures the Itch, takes away Warts, and callous Excreſcences; and relieves in Atrophies, and Palsies of the Limbs, and Pains of the Gout. The Dung is recommended to stop Hæmorrhages.

Aspredo. The Ruff. See *Cernua*.

Astacus, Offic. The Lobster. It is found in the Sea. The Shell of this Fish calcin'd, and drank in Wine, is said to break and carry off stony Concretions in the Kidneys; and it is likely enough to have some Effect in such Cases, because the Shells of Fish calcin'd are a Sort of Lime, and the Salts of Lime are the grand Dissolvents of stony Concretions.

Lobsters as a Food are highly alkaliescent, and consequently must be very proper Food, when an acid Acrimony prevails in the Stomach, and general Habit; but the contrary, in case of a Tendency to an alkaline Putrefaction. They are esteem'd very nourishing, and good in a Consumption.

Astacus fluviatilis, Offic. The Crabs, or Crevis. They are found in Rivers, and the Parts of them used are, the Flesh, and what we call the *Lapilli*, or *Oculi Cancrorum*, known by the Name of Crab's Eyes. In their Head, according to some, or rather in their Stomach, are found two white Stones, as large as a Pea, of a Kind of lenticular or orbicular Form, but compress'd, and somewhat hollow on one Side; whereas the other is convex, and dispos'd in *Laminæ*. These Stones are of an earthy Taste. We frequently meet with a counterfeit Species of this Commodity, prepared of a whitish Earth, and made up in the same Form; but this factitious Kind is easily distinguish'd by breaking them, since they want those *Laminæ*, which are always found in the convex Part of natural and genuine Crab's Eyes. The Flesh of this Animal is cooling, moistening, and adapted to nourish such as labour under Atrophies. The *Stones* or *Eyes* are cooling, drying, abstergent and discutient; they resolve tartareous Concretions, and coagulated Blood, and are possess'd of a lithontriptic Quality; for which Reason they are often prescribed in nephritic Pains, Pleurifies, Asthma's and Colics; they are also proper for cleansing the Teeth. The Shell is possess'd of the same Virtues with the Stones, and is besides of Service in curing such Itches in Children, as arise from saline Humours, and in carrying off the Paroxysms of Intermittent Fevers.

Attagen, Offic. The Gor Cock,
K k 3 Moo

Moor Cock, or Red Game. It is found upon the highest Mountains. The Flesh and Gall are used. *Trallian* recommends this Bird in a *Phthisis*; *Galen* in nephritic Complaints; and *Avicenna* believed the Brains to increase the feminal Secretions. This Bird lives principally on Vegetables, and uses but little Exercise, scarcely ever being upon the Wing, unless to avoid Danger. Hence it does not abound with highly exalted Salts. It is a very agreeable and wholesome Food.

Balæna, Offic. The Whale. The Fat of the Whale is said by *Schroder* to be a good Topic for the Itch. The Oil is more used in Mechanics than Medicine, tho' it is by some recommended for the *Scabies*. It is called Train Oil.

Another Species of Whale, is the *Cetus*, or *Parmassitty Whale*. See *Sperma Ceti*.

Barbus, Offic. The Barbel. It is found in Rivers, and is greatly used in the Kitchen. The Spawn of this Fish, at some Seasons of the Year, is a most violent Vomit and Purge.

Bezoar. This is of two Sorts, either oriental or occidental. The oriental is found in the Stomach or *Omasum* of the *Capra sive Gazella Bezoardica orientalis*, Offic. The Bezoar Goat. These Stones are of different Shapes and Sizes: Some of them are of the Form of a Kidney, or *French Bean*; others are round, oblong, and of an irregular Figure. Each Stone of this Kind is compos'd of several *Laminæ*, form'd of a greenish or Olive-colour'd Substance, diversify'd with white Streaks, which run thro' the whole Body of the Stone. These *Laminæ* adhere so closely to one another, that breaking the Stone, we may observe several Layers of different Thicknesses, and even sometimes of different Colours. There are also found *Laminæ*, which upon breaking these Stones, disengage

and separate themselves very regularly from each other; which they also do, when a considerable Degree of Heat is apply'd to them. The Substance which possesses the Middle or Centre of these *Bezoars*, is usually hard, gravelly, and pretty smooth. The *Bezoardic* Layers, which cover this Substance, are easily broken between the Teeth, to which they adhere like a gently glutinous Substance, and tinge the *Saliva* a little. Authors advise us, to make Choice of Bezoar Stones which are of a moderate Bulk, of a brownish Colour, and which communicate a yellow Colour to Quicklime, a greenish one to Chalk, and which cannot be dissolv'd in Water. If prick'd with a hot Iron, no Bubbles ought to arise round the Iron, which is a Proof, that it is not adulterated with any Resins. The *Laminæ* also must be fine, and disposed in *Strata*. The best Species of these Stones are taken from Animals that feed on large Mountains such as those of *Persia*. *Bezoar* is said to be alexipharmic, and a Promoter of Sweat; is good in Epilepsies, Palpitations of the Heart, Jaundice, Dysenteries, Stone, and Obstructions of the *Menses*; it cures Melancholy, and promotes Delivery; and in these important Intentions, *Schroder* assigns the Dose from three Grains to twelve. But we have no Instances from Experience to support any such Practice. It has neither Smell nor Taste; and upon taking into the Stomach, gives no Sensation, nor produces the least perceivable Effect, which is Ground enough to suspect it good for nothing, altho' our Physicians prescribe it in much larger Doses than what *Schroder* mentions, and others have ventured half a Dram, or a Dram at a time. Many Circumstances contribute to render the medicinal Virtues of *Bezoar* precarious, and not easy to be determin'd, as the Uncertainty of procuring that which is genuine, it being

being much adulterated, as is said, even in the *Indies*; not to mention the large Quantities that are made in *Europe*, in Imitation of the true: Again, the excessive Price it generally bears, makes it inconvenient to exhibit it in a great Number of Cases, and that in sufficient Quantities, and those long enough continued, to determine, whether the Virtues attributed to it are real or imaginary; and without this Test it is not possible to reason accurately and conclusively, with Respect to the Efficacy of any one Simple, tho' the Manner of its Production, and the *Analysis* are both taken into Consideration; neither does the Taste give us any surer Information. As to my own private Opinion, it is of no great Importance in the Case before us, because I have not very often directed it, and consequently am not a Judge of its real Effects: But I am informed from Physicians, who have industriously attempted to make the proper Experiments, that it has no Sort of medicinal Virtues, that they could perceive, which might give it the Preference to the testaceous Powders. I cannot, however forbear thinking, that if we had the genuine *Bezoar* Stone, we should find it endow'd with greater medicinal Virtues, than at present we have any Reason to believe it possessed of.

The *Occidental Bezoar* is produc'd by the *Cervus minor Americanus Bezoarticus*, the Lesser American Deer, being found in the Stomach of this Animal, and is easily known from the *Oriental*, from its being of a paler Colour: It is sometimes of a greyish white, and is form'd on Substances of the same Kind with the *Oriental*. Its *Laminae*, are also sometimes thicker, and striated according to their Thickness. The Virtues ascrib'd to it, are much the same, as those ascrib'd to the *Oriental Bezoar*. *Blatta*, Offic. The slow legg'd

Beetle. The Inside of this Insect, bruised or boiled in Oil, and dropp'd into the Ears, eases the Pains thereof.

Blatta Byzantina, Offic. *Blatta Byzantia*, five *Unguis odoratus*, Park. Theat. The Constantinople Sweet Hoof. This exhibited internally, renders the Body soluble, softens the Spleen, and dissolves peccant Humours. When used externally by way of Fumigation, it restores epileptic Patients, and Women under a Strangulation of the *Uterus*. In other Disorders its Effects are the same with those of the most tenacious Substances.

Bombyx, Offic. The Silk Worm. This Insect undergoes a strange and surprizing *Metamorphosis* in the several Periods of its Existence. This Animal, or Worm, is called *Bombyx*, in the Shops, and is produced from small Eggs, hatched by the genial Heat of the Sun, in the Spring of the Year. It feeds upon Mulberry Leaves, till it has arrived at a State of Maturity. After this they are usually put into a small Bag, where they wrap themselves up in a silken Case, which, coming from their Mouths, is without Interruption carry'd very often round them. This Case is sometimes of a palish Colour. In this Case, or Coat, it remains wrapt up, till it is transform'd into its *Chrysalis* or *Aurelia*, and appears dead: but at last, it sallies forth from its Coat in the Form of a Butterfly, with four Wings; and after a Copulation, which lasts for three Days, and proves immediately mortal to the Male, the Female lays a considerable Number of Eggs, and dies likewise. The whole Worm, and the silken Coat or Covering, are used in Medicine. Silk Worms dry'd, and reduc'd to a Powder, are by some apply'd to the Crown of the Head, for removing Vertigos and Convulsions. The Silk, and Case or Coat, are of a due Temperament

between Heat and Cold, and corroborate and recruit the vital, natural, and animal Spirits. We must take Care not to use the Coat, or Case, if it is either stain'd with their Excrements, or if the *Aurelia*, or Worm remains dead in it.

Bos, Offic. This is a general Name for Black Cattle, as they are called, of which *Taurus* is the Male, or Bull, *Vacca* the Cow, *Vitulus* the Calf, tho' *Bos*, the Ox, is generally understood of the Bull castrated when young. The Horns, Gall, Liver, Spleen, Blood, Marrow, Suet, Oil of the Feet, Hoof, Urine, Dung, the Stones sometimes found in the Gall Bladder, the Milk, Butter, Cheese, *Penis*, and the Balls found in the Stomach, are used in Medicine. The Raspings of the Horn are sometimes used in an Epilepsy, and in Suffumigations, to purify contagious Air. The Gall is esteemed excellent in Ringings and Pains of the Ear, relaxes the Belly, and kills Worms. A Decoction of the Liver of a Calf, is used for Indurations of the Spleen, and a Suppression of the *Menses*; and it is sometimes applied externally to the Region of the Spleen. The Milk is thick and nourishing, and is good in Disorders of the Bladder, Diarrhæa, Dysentery, Tenesmus, and Erosions of the Intestines. The Butter is moderately heating, emollient, digestive, lenient, resolvent, relaxing, and good for Dimness of the Sight. New soft Cheese mitigates Pains of the Gout, and Heat of the Liver, and is reckon'd a good Application in an *Ex-omphalos* in Children: Old putrid Cheese, is said to promote the Solution of Aliment contained in the Stomach, and superior to the Powers of Digestion. Old Leather made of the Hide, burnt or sing'd, is commended for the hysteric Passion. The Fat is of Service, wherever Emollients are required. The *Axun-*

gia, which is melted from the Hoofs, is more penetrating and emollient, because of finer Parts; but the Marrow exerts its emollient Virtue wherever it is applied. The Bones calcin'd, and pulveriz'd, are said to strengthen the Bowels, to stop a Looseness, and to be effectual against Worms, and the Epilepsy, used either internally, or in Ointments, or Plaisters; but it must be understood of such Cases where the Disorder proceeds from an Excess of Humidity, or an Acid, and is to be subdued by Driers and Absorbents. The Hoofs have an anti-epileptic Virtue: Being fried and so taken, they may be of some Service in a Dysentery, where an alkaline, anti-acid, glutinous Faculty is required. The *Talus* of a Cow pulveriz'd, and drank in Wine, is commended by *Forestus*, as a Specific against Worms in the Intestines. The *Membrum genitale*, or Pizzle of a Bull, pulveriz'd, or else in Decoction, is reported to create a Desire of Coition in Men, but an Abhorrence of the same in Women; but Reason does not comprehend these Contrarieties, nor Experience attest them. There is a Stone sometimes found in the Gall Bladder of this Animal, which is called *Bexoar Bovinus*, and *Alcheron Lapis*, by the Portuguese, *Mesang de Vaca*, and by the Arabians, *Haraczi*; which is said by some to have an alexipharmic and anti-epileptic Virtue. But this Stone is not to be confounded with the *Bulitum*, or Ball, which is sometimes found in the Stomach, and sometimes in the Intestines of this Animal. These are usually called *Tophi Bovini*, and consist of Hairs, which it gets off by licking, from its Body, and swallows, where by degrees they concrete into a Ball, which is commonly of the Colour of the Animal's Hair. Sir Hans Sloane, in his History of *Jamaica*, says, that some give half a Dram of it in Powder.

der, as an Astringent. These Balls have sometimes a shining Crust over them, in which Respect they imitate the true Bezoar Stone. The Spleen of an Ox is commended to provoke an Appetite, and distill'd with Spirit of Wine, is recommended for all Infirmities of the Stomach; but the Virtue of this distill'd Liquor, I should think, were owing to the Spirit of Wine, rather than any thing proceeding from the Spleen of the Ox. The Liver of an Ox dry'd and pulveriz'd, is commended as good in Fluxes of the Belly, and Hæmorrhages. If it be serviceable in this Case, it acts as an absorbing, alkaline Powder; but then the Liver of other Animals will have the same Effect. The Dung of an Ox is deservedly commended for its discussive Virtue in external Applications. Hence it is used recent, by way of Cataplasm, in Inflammations, particularly the Gout, as an approved Anodyne. Some mix with it Earthworms, and apply it to the *Abdomen*, in order to cure the Colic, and discuss Flatulencies; as also in the *Ascites*, to repress the Tumor, and discuss the Water; for next to human Dung, that of an Ox is reckon'd the best for this Purpose. *Ettmuller* says, it is very effectually applied to œdematous Tumors. It is also commended against a Suppression of Urine, if applied to the *Pecten*, and the Region of the *Pubes*. The common People give the expressed Juice in Pains of the Colic; and *Ettmuller* asserts, from certain Experience, that it is not only a present Remedy in the Colic, but also in the Pleurisy; that of this Dung, in the same Manner as of human Dung, by repeated Digestion and Sublimation, may be prepared the *Zibethum Occidentale*, so called by *Paracelsus*, because it exhales a sweet Smell like Civet. *Discorides* says, that the Dung of an Ox that grazes, apply'd

recent, mitigates the Inflammation of Wounds. It is wrapp'd, he says, in Leaves, and heated in hot Ashes, and then apply'd to the Place; that a Fomentation of it asswages the Pain of the *Sciatica*; that it discusses Hardnesses, Pain, and *Strumæ*, being anointed with it, infused in Vinegar; and that a Suffumigation of the Dung of the Male of this Species represses the falling down of the *Uterus*; and that the Smell of it, when kindled, drives away Gnats. On these Passages *Matthiolus* remarks, "We are to consider, that all Medicines of this Kind are accommodated to the hard Bodies of Rustics, such as Diggers, Mowers, and such as are inur'd to Work which requires bodily Strength; to such as these, when affected with schirrhous Tumors, it is applied by way of Cataplasm with Vinegar." *Valescus de Taranta* assures us, that the Dung of an Ox, (or a Horse) is of excellent Use in a Gangrene, to preserve the sound Parts from Corruption: And, after him, *Sylvius* and *Barbette*, as they say, made Use of the same Remedy, which they kept as a great Secret. But it is really a sordid Medicine, hardly worthy of a Physician, and to be left to the poor Commonalty, rather than to be recommended to the rich and noble, according to *Heister*. Cows Urine internally used, *Ettmuller* says, cures the Gout, if it be taken in the Month of May, and the Feet are bathed a while in it, and, after that the *Norimberg* Plaster is applied to them. *Discorides* says, that the Urine of a Bull, with Myrrh, instill'd into the Ears, eases Pains thereof. *Helmont* proposes, as an approved Remedy for the Stone, the Liquor that usually fills the Bladder of the *Fætus* in a Cow, drank every Morning to the Quantity of about four Ounces, in a like Proportion of white Wine. The Blood

of a Bull fresh drawn, is reckoned poisonous, by causing a Difficulty of Breathing, and Suffocation; but *Matthiolus* or *Dioscorides* observes, that except it be drank in great Quantities, and hot as it comes from the Veins, before it concretes, it does little or no Harm. This poisonous Quality, is not however confirm'd by later Experiments. But the Blood of Oxen and Bulls is commended, as internally used; for the Dysentery, an Excess of the *Menses*, and other internal Hæmorrhages; and for spitting of Blood, it is prescribed to be taken in Vinegar. Externally it is effectual in dissolving and mollifying Tumours, and clearing the Face of Spots and Blemishes. *Ettmüller* says, the Blood is hardly used, but in Case of an Atrophy of the Limbs and Joints, after great Wounds receiv'd; and for Weakness and Pains in the Members and Joints, which, being thrust into the fresh Blood of an Ox, or a Dog newly kill'd, will be wonderfully refresh'd thereby, and render'd more pliable, and fit for Motion. The Blood of an Ox then, externally apply'd, has three Virtues in common with the Blood of other Animals; which Virtues are derived from its saponaceous Nature, whereby it is a Dissolvent and Aperient, its native Heat promoting its Operation. Internally taken, it is hurtful, by its natural Property, which causes it to concreate in the Stomach, and renders it insuperable by the vital Powers. *Helmont* says, that the Blood of a Bull is Poison, but not that of an Ox or a Cow; and assigns as a Cause the Fury of the Bull, dying with an eager Desire of Revenge, which impresses a Mark of Vengeance, and a powerful Signature, on the Blood. *Guainerius* says, that not only the Blood of a Bull, but that of an old Ox, is poisonous.

Botargum. The Salted Spawn of the Mullet. See *Mugil*.

Bubalus. Offic. The Buffal. The Parts used in Medicine, are the Horns, Hoofs, Tallow, and Dung, of which the Horns and Hoofs, are good against Convulsions; and the other Parts are reckon'd to be endu'd with the same Virtues as that of the Ox.

Buccinum. Offic. The Whelk. Whelks calcin'd, work the same Effects as the Purple Fish, but are of a more caustic Quality. Fill'd with Salt, and then burnt in a crude Earthen Pot, they make a good Dentifrice, and are applied with Success in Combustions, where it must be left alone to harden like a Shell; for, as soon as the burnt Place is brought to a Cicatrix, this Medicine falls off of itself. A Quicklime Lime is made of them. Whelks, are alkaline and absorbent, and by Calcination, are converted into Lime; and these Properties they possess in common with all other Shell Fish.

Bufo. Offic. *Bufo sive Rubeta*, Rali Synop. The Toad. *Ettmüller* informs us, that a live Toad bruised, proves an effectual Remedy for the Bite of the Viper, and other poisonous Serpents, when applied to the wounded Part. Some Authors, as *Helmont* informs us, order live Toads to be apply'd over both Kidneys, for removing the Dropsy, by a plentiful Discharge of Urine. *Paracelsus* affirms, that Toads are of excellent Service in the Cure of Pestilential Buboës in the Groin, and such as Women are afflicted with, *Franciscus Joel* affirms, that a Toad run thro' with a sharp Probe, dried in the Air, and moistened in Vinegar, if apply'd to pestilential Carbuncles, extracts all the Poison from the Body. *Helmont* also from the Toad, prepared an Amulet for the Plague; and others, as *Ettmüller* informs us, prepare Amulets for the same Purpose of the Bones of Toads.

or whole Toads mixed up with I-fing glass, which they say extract the Poison, and prove a Preservative, if hung about the Neck. The above Author says, that a dry'd Toad hung about the Neck, or in the Pit of the Stomach, or applied to the Arm Pits, or even held in the Hand, most effectually stops and cures all Kinds of Hemorrhages, and more especially such as happen in malignant Fevers, Small Pox, and some other Disorders of a like Nature. The Powder of dry'd Toads was the celebrated Secret of *Kyperus*, for the Cure of an *Ascites*. A dry'd Toad inclosed in a silken Bag, with a proper Quantity of the Moss of the Sloe-Tree, if apply'd to the Navel of a Woman afflicted with a Hemorrhage of the *Uterus*, will stop the Flux, as soon as it is warm on the Part. It is by other Authors recommended to be put into a silken or linen Bag, and hung upon the Breast for Incontinencies of Urine, arising from a Violence done to any of the Parts. In the Cure of a Cancer, says *Ettmuller*, and more particularly unexulcerated Cancers in the Breasts of Women, Toads are of singular Service, either calcin'd alone, or dry'd to such a Degree, that they may be reduc'd to a Powder. We are also told, that many Patients labouring under epidemical Dysenteries, have been happily recover'd by the Use of this Powder, which operates as a Sudorific. *D. Carlius* recommends the Powder of calcin'd Toads, mixed with the Powder of blue linen Cloth burnt, in Epilepsies of adult Persons attended with an Inspissation of the Juices: He also informs us, that a Dose, from ten or twenty Grains of the Powder of calcin'd Toads, exhibited internally, wonderfully mitigates arthritic Pains, and more especially those with which Wounds are attended. A Toad's Heart dry'd,

reduc'd to Powder, and exhibited an Hour before the Paroxysm, has in some Cases cured Quartan Agues. A Toad dry'd, is by some apply'd to the Soles of the Feet, by Way of an Epispastic in Fevers, and Disorders of the Head, and if apply'd to the Crown of the Head, is said to cure Madness. The *Oleum Bufonum*, in the *Brandenburgh Dispensatory*, is of great Service in Pustules of the Lips, and Cancers of the Breast; and *Mufitanus* asserts, that it is a great Secret in curing the Falling off of the Hair. Others warmly recommend this Oil in Leprosies, and cutaneous Foulnesses. The *Emplastrum ex Bufonibus* of *Knoffelius*, when apply'd to the Throat, contributes to the Cure of spurious Quinsseys.

Buprestis, Offic. The Burn Cow. It seems to belong to the Kind of *Cantharides*, but it is more oblong in Body; and the crustaceous Integument of its Wings appears outwardly of a green, inclining to yellow, or rather is of a gold Colour; it has longer Legs, and somewhat thicker. The Eyes are globulous and prominent, and from the Forehead, near the Eyes, proceed two oblong articulated Horns. The Head is but small, but the Mouth wide, hard, strong, forcipated, and armed with Teeth, with which it wounds and bites cruelly; the Belly is not round, but runs out in Length. It is of a septic, exulcerating, and heating Quality; for which Reason, it is mixed up with Medicines adapted to the Cure of a *Carcinoma*, *Lepra*, and malignant *Lichen*. Mix'd in emollient Pessaries, it provokes the *Menses*.

Buteo, Offic. The Buzzard. The Testicles of this Animal is the only Part us'd in Medicine. A Decoction of them in Spring Water and Honey, is said to prove a Stimulus to Venery.

Cæcilia, Offic. The Blind Worm, or Sloe Worm. This is a Sort of Serpent, whose Bite has much the same Effects as that of the Viper; and is to be cur'd by much the same Methods. *Dale* from *Gesner*, gives an Account of a *Theriaca* being prepar'd of this Serpent, and Treacle-Water, for a Sudorific in the Plague.

Camelus, Offic. *Camelus*, *Dromos*, *Gesn. de Quad.* The Camel or Dromedary. It is found in *Asia* and *Africa*. The Parts used in Medicine, are the Blood, Gall, Dung, and Urine. The Blood helps the Dysentery, promotes Conception, and cures the Epilepsy; the Dung is recommended in Apoplexies; the Urine is thought to be effectual for cleansing and whitening the Teeth. Authors differ much about the Camel and the Dromedary. The Gentlemen of *Paris*, our *Ray*, and others, call by the Name of *Dromedary*, an Animal which has but one Bunch on his Back; but call a Camel, one which has two Bunches on that Part. But I have been told says *Dale*, by an ingenious Person, who very lately travelled into *Asia* and *Africa*, and agrees with *Johnson*, that the Camel is an Animal with only one Bunch on his Back, but the Dromedary has two; and that this latter was a very scarce Creature, and made use of by the Nobility only for its Swiftnefs; but the Camel was principally used for performing Journeys.

Cancellus, *Aldrov. de Exang.* The Wrong Heir. This Animal is brought from *America*; and the Oil distill'd from it, is esteem'd an excellent Remedy for the Rheumatism.

Cancer, Offic. The Sea Crab. The black Extremities of the Claws, and Shells, are principally used in Medicine, which are Absorbents, and esteem'd Sweetners of the Blood. *Schrader* says, they remove the Pa-

roxysms of Intermittents. The Crab consider'd as Food, has the Reputation of being good in a Consumption, and to cure the Strangury.

Cancer fluviatilis, Offic. The River Crab. Most Authors have blunder'd excessively, in speaking of this Animal, which they take for the Crawfish; whereas it is as different from the last mentioned, as the Sea Crab is from the Lobster. It is not found in the Rivers of *England*, *France* or *Germany*; but is frequent in those of *Greece*, *Crete*, *Sicily*, *Russia* and *Tartary*. Therefore, when *Galen* recommends the River Crab burnt, as a Specific against that Disorder, caus'd by the Bite of a mad Dog, Crawfish is not to be understood, but the true River Crab, the Subject of our present Enquiry. They are esteem'd refrigerating and moistening, and are said to ease Pain, and compose the Spirits. Hence they are used in Heat, and Pain of the Head, and Kidneys, a Quinsy, and Atrophy; and are said to be a good external Application in the *Ignis Persicus*, a Species of Carbuncle, and for Burns.

Canis, Offic. The Dog. The Head, the Fat, the Gall, the Blood, the Dung, called *Album Græcum*, the Urine, the Teeth, the Skin, and the Hairs are used in Medicine. Live Puppies laid upon the Belly, mitigate Colic Pains, and are serviceable to Paralytic Limbs; and there are many Instances in Authors, of inveterate Ulcers being cured, by being frequently lick'd by a Dog. The Head burnt, dries up Ulcers, cures Fissures of the *Anus*, and Tumors of the Testicles; internally it is of Service in a Jaundice. The Fat is esteem'd hotter than that of other Animals, and is given internally, in order to absterge and consolidate Wounds and Ulcers, in a Consumption, and to dissolve Blood coagulated by a Bruise. Externally it is used

used in Pains of the Ears, and Tortures of the Gout, to kill Knits and Lice, for Deafness, and the Itch. The Gall of a black Puppy is esteem'd a Specific in the Epilepsy; and externally applied, absterges Freckles on the Face, and cures Specks on the Eyes. The Blood drank is said to be good against the Bite of the Animal, and Poison. The Dung dries, absterges, discusses, opens, breaks Abscesses, and deterges Exulcerations; hence it is given internally in a Dysentery and Colic. Externally apply'd, it cures a Quinsy, and malignant Ulcers, mollifies hard Tumors, draws off the Waters of Hydropic Patients, and cures Warts. The Urine is apply'd to running Ulcers, and Scurf of the Head, and to Warts. The Ashes of the Teeth, facilitate the Dentition of Children, and cure the Tooth-ach. The Skin tann'd, cures the troublesome Itchings of the Hands, and mollifies contracted Tendons. The Hair is said to cure the Bite of the Animal.

Canis Carcharias, Offic. The White Shark. This Animal is found both in the *Mediterranean*, and main Ocean. The Teeth of the Serpent, and also of this Fish, when petrified, are the *Glossopetræ* of the Shops. Its Teeth are esteem'd good against Poisons. Women hang them about the Necks of Children, because they are commonly thought to assist Dentition, and prevent Frights. The *Glossopetræ* are thought by some to be possess'd of an alexipharmic Quality.

Cantharides, Offic. Spanish Flies. These are a Species of Insects too well known to require a Description. They are principally found in warm Countries, as *Spain*, *Italy*, and *France*. They are extremely hot, corrosive, and diuretic, and are said to be somewhat emmenagogue; and they are remarkable for affecting the Bladder

and urinary Passages with Inflammation, excessive Pain, and Strangury, either taken internally, or apply'd externally; and some have even affirm'd, that carrying a Quantity of them in the Pocket for some time, has produc'd this Effect. Upon taking *Cantharides* internally, all the Parts from the Mouth to the Bladder seem to be corroded, the Breath smells like the Resin of Cedar; the *Præcordia*, especially on the right Side, are inflam'd; Urine is discharg'd with Difficulty and Pain; and at Intervals Blood is evacuated along with it; the Stools are mucous and purulent, as in a Dysentery; the Patient loaths his Food; faints, is seiz'd with a *Vertigo*; and at last looses the Use of his Reason. In order to mitigate these Symptoms, a Vomit must be exhibited, and copious Draughts of diluting Liquors, with Emollient, oleous, and mucilaginous Substances are to be given; but it is said that nothing is so proper, as saline Acids, which resist Putrefaction, drank in a proper Quantity, and apply'd externally. The best for external Use is warm Wine Vinegar, and in the Case of a Priapism, the Lees of generous Wine; but for internal Use, simple Oxy-mel is said to be best. Mean time, however, mucilaginous and cooling Clysters are frequently to be injected. Notwithstanding these Effects of *Cantharides*, they are sometimes given internally in Substance, in nephritic Cases particularly, and especially to Women, well guarded with mucilaginous Substances and Opiates; and *Groenvelt* has wrote a Treatise, in order to establish their Use in this Manner. Their Tincture, however, is frequently directed internally in nephritic Cases, and as a Diuretic, when the Constitution abounds with Serum, and the Urinary Passages are obstructed; and sometimes they are exhibited in order to cleanse, and deterge the

the *Uterus*. The Use of *Cantharides* was known to *Hippocrates*, who mentions them frequently, but not with a View of exciting Blisters, for he directs them to be given internally as a Diuretic, for expelling the Secundines, and as an Emmenagogue; and he further advises them, as an Ingredient in Pessaries, in order to cleanse and deterge the *Uterus*. *Aretæus* was the first who order'd these Insects to be rubb'd on the Skin of the Head, in order to excite Vesicles. This Author recommends *Cantharides* in the Cure of an Epilepsy, and orders the Patient to use Milk for three Days before their Exhibition, to prevent the Injury the Bladder might otherwise sustain. The same Method of curing this Disease, and Palseys, was, according to *Aetius*, follow'd by *Archigenes*, whom we may reasonably suppose, to have been of the same Sect with *Aretæus*. *Galen* informs us, that Plaisters made of these Flies, may very properly be used for the Cure of Baldnesses, the Itch and Ring Worm; but according to *Le Clerc*, he either disregarded this Medicine in the Cure of most other Diseases, or, as appears from his own Writings, rarely used it, as being attended with dangerous Consequences. As the *Greeks* who came after *Galen* advanc'd very little new upon any Subject, so they have been no less indolent with Respect to this Particular. The *Arabians* also, are in vain consulted in this Affair, who, tho' strongly addicted to composing new Forms of Medicines, yet in this Particular, as in most others, follow'd the Footsteps of the *Greeks*. Among the *Latins*, *Cantharides* seem to have been in very little Repute; and *Celsus* himself, who deals very much in *Sinapisms*, makes no mention of them so far as we know, except when, in Imitation of *Mico*, he recommends them for deterging and removing Pimples. *Pliny* informs

us, that anointing the Parts affected with *Cantharides* is good against the Leprosy, the Ring Worm, and for extracting Darts. And *Scribonius Largus* is the only Author who extols them, when mixed with proper Cerates, for removing Scars. These are almost all the Cases in which the Antients apply'd *Cantharides* to the Skin; which was very rarely, and only when cold Humours were to be removed, and when the Disorder was become inveterate. Long after the Restoration of Learning, *Cantharides* were also as scantily used: For *Fernelius* only prescrib'd them in Blindness, and in Dropsies; but tells us at the same Time, that their Use requires the highest Caution and Prudence. *Hollerius*, a Contemporary of *Fernelius*, an Author of a fine Taste, and a Man well acquainted with the Writings of the Antients, orders *Cantharides* to be mixed in stimulating Topics, for removing a Lethargy; tho' *Duretus*, who wrote the *Adversaria* to the Works of *Hollerius*, dissuades the Use of stimulating Topics in this Disorder, because it is accompanied with a Fever, in which Case hot Substances are highly improper. It is however, a memorable Cure, which *Paré* and *Hollerius* perform'd by *Cantharides*. They advis'd a certain Lady of Distinction, whose Face was all over deformed with burning Pimples, as if she had labour'd under an *Elephantiasis*, to apply a Vesicatory of *Cantharides* all over her Face, by which means she was afflicted with such racking Pains, and seized with a Fever so violent, that no hopes of her Life seem'd to be left: However, by the joint Care and Skill of these two, she was restored to Health, the Deformity of her Face disappear'd, and never created her any Trouble for the future. The same *Hollerius*, when speaking of Caustics, affirms, that sciatic and arthritic Pains, Hemicranias, and Head-

Head-achs, are often relieved in consequence of the Blisters or Vesicles raised by *Cantharides*. He also tells us, that the *Viscera* are purg'd, the Body entirely freed from recrementitious Sordes, and a large Number of old and obstinate Disorders cur'd, by means of *Cantharides*. But in our Days, the external Use of *Cantharides* is very extensive, especially in our own Country; and they are perpetually apply'd in acute Distempers, but I am afraid sometimes wantonly, and without due Distinction; for as the Salts of *Cantharides*, which manifestly get into the Blood thro' the Pores, exert great Effects in the Body, it is always worth while to consider, the Quantity proper to be applied, that their Degree of Action may be in some measure determin'd; and 'tis farther worthy of Consideration, whether the Operation of these Salts is likely to be beneficial or otherwise, in the Distemper in which they are applied. For my own part, I imagine the great Use of *Cantharides* externally applied, is first in Disorders where *Serum* greatly abounds in the Blood, for the Discharge excited by the Skin, removes a Part of that which is redundant; and besides, the Salts acting in the Body, open all the Glands and Emunctories, and promote a farther Discharge of *Serum*, by the urinary Ducts, and very likely by the salival Glands, and cutaneous Pores. The external Application of *Cantharides*, may be further very beneficial in most inflammatory Disorders, and all those which proceed from a Viscidity and Sickness of the Blood and Juices, and their Tendency to Coagulation; for the Salts of these Insects fuse the Humours, render them more fluid, and not only prevent their Stagnation, but even farther exert great Efficacy in reducing the Particles already coagulated and stagnating to a due Fluidity, and thus removing Ob-

structions. And in all Distempers whatever, particularly those which affect the Head, the *Fauces*, or the immediate Organs of Respiration, *Cantharides* apply'd to distant Parts, may by causing a Revulsion, and inviting the Humours to the Place which they immediately affect, may be very beneficial. Moreover in a *Langour* of the Circulation, and *Stupor* of the nervous System, the external Application of *Cantharides*, may be of very great Service by their *Stimulus*. Upon the whole, *Cantharides* appears to be adapted particularly to cold Distempers, Constitutions, Climates, and Seasons; for in those which are the Reverse of these, they may over-act their Part, fuse the Blood, accelerate the Circulation, and stimulate too much, and hence become greatly prejudicial; and besides, their highly alkaline and acrid Salts may incline the Juices to Putrefaction, and hence become fatal. *Bagliivi* made the following Experiments, with a View to discover the Effects of *Cantharides*. At *Rome*, says he, in the Month of *May*, I open'd the right Jugular of a Mastiff Dog fixed to a Table, and by the Assistance of a Syringe, injected two Ounces of the Tincture of *Cantharides*; and this Tincture consisted of two Drams of *Cantharides* reduc'd to a Powder, and six Ounces of the Water of *Carduus Benedictus*, digested for three Days on hot Ashes. After the first Injection, the Dog vomited an aqueous and viscid Substance, and discharged a viscid *Saliva* from his Mouth, till at last two Ounces being injected, the Orifice was stitch'd up, and calcin'd Vitriol sprinkled in it. No sooner was this Operation perform'd, than the Dog dropt to the Ground, as if he had been dead. He would eat no more during the remaining Part of his Life, but had a violent Drought, for which Reason a Servant, prompt-

ed by a Principle of Compassion, without my Knowledge, gave him about twelve Pints of Water, by drinking of which, he discharg'd a large Quantity of yellow Urine. In the mean time he howl'd, and his insatiable Thirst continued, but we gave him no more Water. Before his Death he was seiz'd with Convulsions, and on the fourth Night after the Injection was made, died howling in the most lamentable Manner. Upon opening his Body, we found that Part of his Neck, where the Injection had been made entirely sphacelated and fetid. In the right Ventricle of the Heart, a large Quantity of very black Blood, little or not at all coagulated, fluctuated, and on the Surface of the Blood some small Drops, as it were of Oil, floated. In the same Ventricle, we also found a small *Polypus*, surrounded with some grumous Blood. In the left Ventricle of the Heart were found two long slender *Polypuses*, and the Blood contained in it was highly black, and colliquated. The Lungs and other *Viscera*, were entirely sound; but that mucous Substance with which the Urinary Bladder is naturally lin'd, was entirely destroy'd, perhaps by the Acrimony of the *Cantharides*. The Bile in the Gall Bladder was become somewhat blackish. The Blood which flow'd from the open'd Veins or *Viscera*, was highly black, but not at all coagulated, and had small Drops as it were of Oil, floating on its Surface. At Rome in the Month of July, I injected two Ounces of the Tincture of *Cantharides* into the right Jugular of a young middle sized Dog, fixed to a Table. After the Wound was stitched up, and dress'd, as in the former Case, the Dog forthwith vomited, and dropt down, as it were half dead. Two Hours after, he hung out his Tongue, with the greatest Signs of an insatiable Thirst. He

would eat nothing, and notwithstanding his Thirst, I would allow him no Water. Six Hours after, he died howling in the most terrible Manner. Upon opening his Carcase, all his *Viscera* were found to be sound. His Blood, however, was highly black, and colliquated, and had, as in the former Case, as it were small Drops of Oil floating on its Surface. This Dog was young, of a small Size, and had drunk no Water; 'tis therefore no Wonder, if the Humours being suddenly dissolv'd and colliquated by the Caustic Salt of the *Cantharides*, he should die in six Hours after the Experiment was made. In both Dogs I observ'd, that after injecting the Tincture into the Jugular, no Part was so soon affected as the Head, which immediately nodded, and hung down; neither could the Animal stand with a strait Neck. The Former of these Dogs immediately hung down his Head, and could scarce raise it up; but upon drinking twelve Pints of Water, he immediately started on his Feet, mov'd his Head freely, kept his Neck strait, and became more brisk and chearful than before. But he had scarce sooner discharg'd the Water by Urine than he dropt down to the Ground, raised his Head no more, but died on the fourth Night half stupid, and nodding his Head. Hence it may be inferr'd, that *Cantharides* are principally prejudicial to the Head, and consequently highly improper in acute and inflammatory Disorders of that Part. But this Assertion must rather be confirm'd by Experience, than establish'd by Conjecture and *Hypothesis*. At Rome, in the Month of April, I took eight Ounces of Blood newly taken from a certain Patient, this Blood divided into two Vessels; immediately after Extraction I mixed a Scruple of powder'd *Cantharides* with the Blood contain'd

in one of the Vessels, and left that in the other without any Mixture at all. The Blood mixed with the *Cantharides*, coagulated before that left without any Mixture; but afterwards assumed a livid blackish Colour, and a slender blackish Pellicle appear'd on its Surface. At last over the whole Surface of the Blood appear'd a large Number of Vesicles, which, when broken, discharg'd a blackish Serum, and soon after the whole of the Blood was dissolv'd into a black, and somewhat livid Serum. The Blood in the other Vessel, and which remain'd without the Addition of any thing, did not undergo the like Changes. In the same Month, after taking Blood from a certain feverish Patient, *Baglivi* separated the Serum from the Blood, and mix'd with the former a Scruple of the Powder of *Cantharides*. A little after the Mixture he observ'd; that the Powder was precipitated to the Bottom of the Vessel without communicating any Colour to the Serum, which only became more liquid, thin, and scarce afterwards to be coagulated.

Capra, Offic. The Goat. The Parts in Use of this Animal are the Blood, the Marrow, the Suet, the Milk, the Whey, the Stones in the Stomach, the Dung, the Urine, the Bladder, the *Omentum*, the Skin, and the Gall. The Blood is accounted alexipharmic, deobstruent, proper in Dysenteries, and calculated for resolving coagulated Blood, and dissolving the Stone. The Marrow is more acrid and dry, and consequently more efficacious, than that of other Animals. The Suet is a powerful Discutient, relieves those afflicted with Arthritic Pains, removes Stranguries, and allays Hæmorrhoidal Pains. The Milk is of a nutritive and abstergent Quality, and esteem'd proper for hectic and phthical Patients, and such as are

consumptive or emaciated. The Whey is preferable to that obtain'd from the Milk of any other Animal, as it is aperient, abstergent, attenuating, and laxative; and for that Reason used in Infusions for purging Melancholy. The Stones found in the Stomach and Gall Bladder, are said to be possess'd of a resolvent and diaphoretic Quality. The Dung is of a heating, drying, abstergent, digerent, aperient, and acrid Nature; for which Reason it is principally used in hard Tumors of the Spleen and other Parts, Swellings of the Parotid Glands, Buboes, and for consolidating desperate Ulcers, as also in Dropsies, and sciatic Pains. When calcined, it makes a fine Powder, proper in all Cases where the Use of Detergents is indicated, such as an *Alopecia* and Ring-worms. Internally it is properly exhibited in Disorders of the Spleen, Jaundice, Obstructions of the *Menses*, and other Diseases of a like Nature. The Urine is recommended above that of all other Animals for dissolving the Stone, and promoting a Discharge of Urine; for which Reason it is proper in a Dropsy. The urinary Bladder dry'd and reduc'd to a Powder is said to be a Medicine of peculiar Efficacy in an Incontinence of Urine. The *Omentum* apply'd hot, allays and checks turbulent Motions of the Spirits, for which Reason it is very properly used in Colic Pains and a *Mania*. The Skin relieves *Diarrhæas*, stops Hæmorrhages, and especially that of the Nostrils. The Gall is said to cure Quotidian Fevers.

Capra Alpina, Offic. The Chamois or Gems. It is frequently met with among the *Alps*, belonging to *Switzerland*, and the Country of the *Grisons*, being a Sort of wild Goat, in Shape and Size resembling the tame one, with short Horns, the Extremities of which are hook'd.

The Parts used in Medicine, are the Blood, Fat, Liver, Gall, Dung, and the *Ægagropila*, or German *Bezoar*, which is a little Ball found in the Stomach of this Animal, which some have pretended to be formed by the *Doronicum*, or Leopards Bane, on which this Animal feeds; but it is now certain that it consists only of Hairs, which it swallows, and the like Balls are sometimes found in the Stomachs of Cows, Hogs, Boars, and other Animals. The fresh Blood of this Animal is a Cure for the *Vertigo*; the Fat is good for the *Phthisis*, and Exulceration of the Lungs; the Liver stops a Looseness, the Gall clears the Eye of an *Albugo*, and helps a *Nyctalops*. The Dung wastes and expels the Stone: And the *Ægagropila* besides its Virtues in almost all Manner of malignant Diseases, is thought to procure an easy Delivery.

Capra Bezoardica. The Bezoar Goat. See *Bezoar*.

Capreolus, Offic. The Roe Buck. It is found in *Scotland*. The Parts used in Medicine are the Rennet, Liver, Gall, and Dung. The Rennet is good for a *Diarrhœa* and Dysentery, the Liver is supposed to sharpen the Sight, and stops an Hæmorrhage, especially at the Nostrils; the Gall clears the Face of Spots, the Eyes of *Albugines*, Films, or other Defects, helps the Ringing in the Ears, and mitigates the Tooth Ach: The Dung cures the yellow Jaundice.

Carduelis, Offic. The Gold-Finch. The whole Bird is used, which if roasted, and eat, is said to be a good Remedy against Iliac and Colic Pains.

Carpio, Offic. The Carp. The Gall of the Carp is good for Dimness of Sight, and Clouds in the Eye. The Fat is of Service in hot Affections of the Nerves. The triangular Lenes found in the Mouth

called *Lapides Carpcionum* are recommended in the Colic, Stone, and Epilepsy; and are said to extinguish Thirst in Fevers, and restrain Hæmorrhages of the Nose, if held in the Mouth.

Caseus, Cheese. See *Bos*.

Castor, Offic. The Beaver. There are two Sorts of *Castor*, the *Russian* and the *American*, but the *American* is esteem'd by *Geoffroy* of very little Value. The *Castor* or Beaver is an Animal which lives very much in the Water, and is furnish'd with two large Glands near the *Anus*, which separate an oily Liquor probably of the same Use, as the oleous Glands about the same Parts in Fowls, which supplies them with an unctuous Liquor, that they anoint their Feathers with, to preserve them from being too much affected by the Water. Hence it has been fabled that this Animal, sensible the Hunters pursue him for the Sake of his Testicles, sometimes stops and bites them off, and leaves them to his Pursuers in order to save his Life; for the Beaver, when hunted, and when just going into the Water, frequently stops, putting his Mouth towards the *Anus*, in order to furnish himself with the Oil these Glands contain, to anoint his Fur with, and preserve it from being injur'd by the Water. But the Animal which produces the *Russia Castor*, is said to be vastly different, from that whence the *American Castor* is produc'd. The Fat of the Beaver is said to be peculiarly adapted to Disorders of the Nerves and *Uterus*, and therefore to be good in Epilepsies, Palsies, Convulsions and Apoplexies. The Skin is recommended in the Gout and Palsies. The Glands abovemention'd, which are not the Testicles, are what we usually call *Castor*, which heats, dries, attenuates, opens, discusses Flatulences, corroborates the nervous System and Head, excites

excites the Spirits when torpid, resists Poisons, causes Sneezing, is Anodyne, and provokes the *Menses*. Hence it is of Use in a Lethargy, Apoplexy, Epilepsy, Palsy, Vertigo, Tremor of the Limbs, Defluxions on the Joints, Hysterics, and Colic Pains, both externally and internally used. It has further the Reputation of curing Ringing of the Ears, Difficulty of Hearing, and Pains of the Teeth, and of correcting the Virulence of *Opium*. As *Castor* consists of very minute and penetrating Parts, and is possess'd of a certain Acrimony, it should seem to be a tolerable Medicine, when the Intention is to rouse and excite a languid Circulation.

Catulus. A Puppy. See *Canis*.

Catus & *Felis*, Offic. The Cat. The Fat, Flood, Head, Dung, Skin, and Secundines are used in Medicine. The Fat of a wild Cat heats, mollifies, dissolves, and is of great Service in Affections of the Joints. The Blood cures a *Herpes*. The Head of a black Cat incinerated is said to be an excellent Medicine for Diseases of the Eyes, as the *Unguis*, *Nubecula*, *Albugo*, and other Disorders. The Dung cures an *Alopecia*, and helps the Gout. The Skin is worn to heat the Stomach, and contracted Joints. And the Secundine is hung about the Neck, to preserve the Eyes from Disorders.

Cera alba, & *citrina*, white and yellow Wax. See *Apes*.

Cernua, Offic. *Aspredo fluviatilis*, Gesn, de Aquat. The Ruff. This Fish is common in many of our large Rivers. *Gesner* recommends a Bone found in the Head of this Fish, for the Stone in the Kidneys; and for pungent Pains about the Ribs, and in other Parts.

Cervus, Offic. The Stag. The Parts used in Medicine of this Animal are, the Bone found in the Heart, the *Penis*, the Testicles, the Blood,

the Tears, the Marrow, the Suet, the *Astragalus*, or the Bone of the Heel, the Stones found in the Stomach and the Horns. The Bone of the Heart is recommended against Poisons, and for procuring Longevity, and is particularly adapted to Disorders of the Heart; for which Reason it is an Ingredient in Medicines of a cordial and comforting Nature. It is externally recommended as an Amulet in Hemorrhages, but all these Virtues seem to be founded on Superstition. The *Penis* is diuretic, stimulating to Venery, is good for Dysenteries and Pains of the Colic, and for Hysterical Disorders. It is further recommended for Ruptures, dry'd and taken in Powder. Externally it is used for a Difficulty of discharging the Urine; as also for bloody Urine, the Plague, and for promoting Deliveries. Exhibited in Wine, it is said to be good against the Bites of venomous Animals. The Testicles are said to excite venereal Inclinations, and Abilities. — The Blood when dry'd and infus'd in Clysters, cures Ulcers of the Intestines, and inveterate Fluxes; and when drank in Wine is effectual against Poisons. It is also commended against the Gout, Sciatica and Pleurisy. The Dose is from half a Scruple to a Dram. The Tears of the Stag, which are the *Sordes* collected in the greater or anterior Angle of the Eye, resembling indurated Wax, or rather the indurated Wax of the Ears, and which smell somewhat rank, like the Sweat of the Animal, are recommended for their drying, corroborating, astringent, and diaphoretic Qualities. They are also said to be good against Poisons, and contagious Diseases; and to be proper in difficult Labours, and for expelling the dead *Fœtus*. These Tears are by some called the Stone, or *Bezoar* of the Stag. The Marrow of the Stag is by some thought preferable to the

Marrows of other Animals, for alleviating Pains, and healing malignant Ulcers. *Dioscorides* informs us, that those who are anointed with it are Proof against Poisons. When this Marrow is old, it becomes rancid, acrid, inflammatory, corrosive, and of a caustic Quality: But, when recent, it is of a mild and oleous Nature, and consequently proper for softening indurated Parts, and moistening such as are dry. Hence we know when its Use is proper, either externally, for anointing any Part affected, or when exhibited by way of Draught; or when injected, by Way of Clyster, in Gripes of the Intestines. *Galen* recommends it for provoking the menstrual Discharge. That the Suet banishes Serpents from those who are anointed with it, as *Dioscorides* informs us, seems to be founded on the Persuasion, that the Stag, and all its Parts, are possessed of a Quality, whereby they resist Poison. This Suet is also said to be good for softening Tumors, conglutinating Wounds, curing Chilblains, and alleviating Pains, even those of the Gout. It is also said to be good for *Hernias*, Excoriations of the *Perineum*, and Freckles and Exulcerations of the Face. It is a proper Ingredient in Clysters intended for the Cure of Fluxes and Dysenteries. The Oil distill'd from this Suet is said greatly to alleviate Arthritic Pains, if the Part affected, is frequently anointed with it every Day. According to *Hoffman*, when laid upon a Linen Cloth, melted at the Fire, and apply'd to the Gums, it surprisingly alleviates the Tooth-Ach, and extracts the Worms which create the Pain. According to *Ettmuller*, "The Suet of the Stag is
 " an excellent consolidating Medi-
 " cine in superficial Excoriations.
 " In a falling down of the *Anus*, let
 " the Part be anointed with it warm,
 " and gently put up. It is also an

" excellent Medicine for an *Inter-*
 " *trigo*, or Galling of the Skin;
 " as also for Fissures of the Hands
 " and Feet produc'd by Cold; for it
 " is of a more penetrating and resol-
 " vent Nature than any other pin-
 " guious Substances. *Dr. Nestor*
 " put one Drop of Stags Suet in
 " the Urine of any Patient who was
 " thought to be dangerously ill. If
 " this Drop subsided in the Urine,
 " he pronounc'd the Case desperate;
 " and, if it floated, he prognosti-
 " cated a Recovery." *Hippocrates*,
 in his Book *de Morb. Mul.* ordered
 melted Stags Suet, mix'd with Oil
 of Roses, to be laid upon Wool, and
 put into the *Pudenda*, in Child-Bed-
 Women, when the *Lochia* were not
 discharg'd. The same Author re-
 commends this Suet as a proper In-
 gredient in Pessaries against Exulce-
 rations of the *Uterus*; and when, in
 order to provoke the menstrual Dis-
 charge, acrid Pessaries have been
 us'd, he orders these to be laid aside,
 and the Suet of the Stag, melted in
 Wine, to be apply'd. As for the
 Ankle Bone of the Stag, or that
 small square Bone protuberating a-
 bove the Hoof, the Powder of it is
 by some highly commended against
 Dysenteries, Colics, and the Stone.
Johnston informs us, that *Rhasis* re-
 commends the Brain of the Stag in
 Pains of the Hips and Sides; as also
 for the Cure of Fractures. The
 Skin of the Stag is recommended a-
 gainst Strangulations of the *Uterus*.
 When applied to the Loins, it is said
 infallibly to promote the Expulsion
 of the *Fætus*. *Burrhus* recommends
 Stockings of it against the Gout.
 The Shavings of this Skin taken off
 with a Pumice Stone, and triturated
 with Vinegar, are said to be proper
 for anointing an *Erysipelas*. The
 same put in Beds is said to be a Re-
 medy for an involuntary Discharge of
 Urine. The Lungs of the Stag, if
 used as an Aliment, are said to be of
 ease

easy Digestion, and *Pliny* informs us, that the Lungs and *Oesophagus* of this Animal, dry'd in the Smoak, beat with Honey, or daily taken in Wine, are good against a Cough and *Phthisis*. The Stones found in the Stomach of a Stag, is said to agree in Virtues with the *Bezoar*. But the Part of a Stag most celebrated in Medicine is the Horns, which when crude are said to resist Putrefaction, correct Malignity, and to preserve the Texture of the Blood. Hence it is used in the Small-Pox, Measles, and malignant and putrid Fevers, but in these Intentions as well as in all others where it is recommended, the Horns of the Buck are used promiscuously with those of the Stag, and must be equally effectual. Calcin'd Hartshorn is generally recommended against Putrefaction, for stopping Fluxes and Hemorrhages, for killing Worms, and exciting a *Diaphoresis*. It is also recommended for provoking the *Menses*, for curing the Jaundice, Spitings of Blood, Ulcers, and Defluxions of the Eyes. It is also recommended for Dentifrices, and against Pains of the Bladder, in Conjunction with *Tragacanth*. Some absolutely reject calcin'd Hartshorn, affirming that by the Calcination it is reduc'd to a dead Earth, and destitute of all Medicinal Virtue. *Ettmuller* tells us, "That it is a pure dead Earth, " which either as an Alexipharmic, " or Diaphoretic, produces no Effect at all; except, perhaps, in a " very remote and accidental Manner, by powerfully absorbing the " Acids of the *Primæ Viæ*; rendering them insipid, or changing them, and, by that Means, preventing their Action on the Parts " of the Body. But in *Diarrhæas*, " and a Laxity of the Intestines, by " absorbing the Humidity, it produces good Effects, and may,

" therefore, be properly exhibited " in acute Disorders, attended with " Fluxes, Hemorrhages, Vomitings, and a *Cholera*. Where an " Acid abounds in the Intestines, it " is also properly prescrib'd; for it " powerfully absorbs Acidities, and " various acrid Humours." It is also properly exhibited for expelling Worms of the Intestines, especially those of Children. Upon the whole calcin'd Hartshorn seems to act as an alkaline Absorbent only. Decoctions of the Shavings of Hartshorn uncalcin'd, in Water, may prove beneficial, where the Acrimony of the Humours is to be corrected, where the Constitution is dry, and wants to be moisten'd, and where Thirst is to be allay'd; but they are more proper in Disorders arising from Acidity, than in such as arise from an *alcalescent* State in the Juices. In some foreign Countries a Water is distill'd from the tender Horns of the Stag, which is esteem'd prodigious cordial, and is particularly celebrated, in the Disorders of Childbed Women, and for promoting the Expulsion of the *Fœtus*; but it is highly improbable, that it should be possessed of any more Virtues, than common distill'd Water.

Cervus minor Americanus. The lesser American Deer. See *Bezoar*.

Cetus. The Parmasitty Whale. See *Sperma Ceti*.

Chama, Offic. The Bastard Cockle. It is found in the *Mediterranean* Sea. *Dioscorides* says, that the Broth of this and other such Shell Fish, made by boiling them in Water, is laxative, and keeps the Belly open: He adds, that it is usually taken with Wine.

Chamæleon, Offic. The Chamelion. The Gall, Heart, and the Animal itself are used in Medicine. The Gall removes Suffusions. *Pliny*

recommends the Heart against Quartans, and *Trallian* recommends it against Epilepsies and the Gout.

Cicada, Offic. The Baulm Cricket. This Insect is common in *Italy*, but unknown in *England*. It is furnish'd with Wings, and is somewhat like a Cricket, very noisy, and living only on Dew. In the Kingdom of *Naples* innumerable Multitudes of these Insects are continually sucking and feeding upon the round leav'd *Ash-Tree*, from whose Wounds, by Exudation, proceeds *Manna* as is said. These Insects are used, when dry'd, in Colics; and are recommended to be eaten roasted, in Disorders of the Bladder. The Ashes of these, burnt, are said to wear away the Stone.

Cicindela, Offic. The Glow Worm. The whole Insect is used, and is recommended by some against the Stone. *Cardan* ascribes an Anodyne Virtue to it.

Ciconia, Offic. The Stork. This Bird is seldom found in *England*. The Parts used in Medicine besides the whole Bird, are the Gall, Fat, Dung and Claw. The Stork is a remarkable Alexipharmic, being suppos'd a most excellent Remedy for all kinds of Poison, and especially the Pestilence; and also for Affections of the Nerves and Joints. The Gall is recommended for Diseases of the Eyes; the Fat is good to anoint gouty and trembling Joints; the Dung, drank in Water, is suppos'd to cure the Epilepsy, and other Diseases of the Head; and the Ventricle, or Claw, dry'd and pulveriz'd, is account'd an extraordinary Secret in Cases where Poison is concern'd.

Cimex, Offic. The Wall Louse, or Bugg. It is found in Beds, being a small Insect, of a Rhomboidal Figure, and a dark brown Colour, with six Feet, and a very tender Skin, so that it bursts with the least

Compression, and emits a most offensive Smell. Given to the Number of seven, as Food, with Beans, they help those who are afflicted with a Quartan Ague, if they be eaten before the Accession of the Fit; swallowed alone without Beans, they are good against the Bite of an Asp; the Smell of them relieves under hysterical Suffocations; drank in Wine or Vinegar, they expel Leeches that have been swallow'd and pulveriz'd, and introduc'd into the urinary Passages, they cure a Difficulty of Urine.

Coccinilla, Cochineal. See *Cochinilla*.

Coccus Polonicus. This is a *Nidus* of an Insect found adhering to the Roots of the *Polygonum cocciferum*, or *Polonian Knawel*, and is used in dying Scarlet. The learned *Pauli* informs us, that the common People in *Silesia* swallow every Year three Grains of it, in order to prevent the Attack of Fevers; but he justly censures this as a superstitious Practice, as it is not attended with the propos'd Success. The same Author also brands, with the odious Name of Superstition, the Practice of the credulous and giddy Multitude, who, about the Middle of the Day, on St. *John's* Eve, dig up these Grains, in order to imprint on their Shirts and Breasts certain Characters, with the bloody Juice they yield upon being bruiz'd, thinking, by this Means, to escape Falls, Contusions, Wounds, the Bites of mad Dogs, and a large Train of other Diseases. But tho' this learned Author affirms, that he has just Cause to detest and condemn the internal Use of them, yet I see, (says *Rieger*) no Reason why they should be rejected for medicinal Purposes, since the whimsical Uses, to which superstitious Fools apply any Medicine, can never rob it of its real and inherent Virtues. This he is the rather inclin'd to think, because the *Coccus Polo-*

Polonicus, is found from Experience, to have the same Efficacy in Medicines as the *Kermes*, and may be safely used as a *Succedaneum* to them. They are not, however, as yet received into the Shops. If in Cases of this Nature, Conjectures are pardonable, I am inclined to think, that the *Cocca Polonica*, if subjected to the same Chymical Analysis as the *Kermes*, would yield the same Principles, and discover themselves to be of a similar Nature.

Cochinilla, or *Coccinilla*, Offic. *Cochineal*. This is an Insect generated in, and feeding upon the *Ficus Indica major*, *lævis*, *sive non spinosa*, *Vermiculos*, quos *Cochinilla* vocant, *preferens*, Plukn. Phytog. which grows plentifully in *New Spain*, and *Mexico*. It is esteem'd greatly cardiac, sudorific and alexipharmic, and is said to cure all Fevers, however malignant; it is therefore often given in the Plague and petechial Fevers. *Geoffroy* says, that *Cochineal* is used in all the same Intentions with *Chermes*. I have no Reason to believe these Insects to be possess'd of any considerable Medicinal Virtues. They are principally employ'd in giving a red Colour to Tinctures.

Cochlea terrestris, *Limax terrestris*, Offic. *Cochlea testacea*, Schrod. The Snail. Snails are said to refrigerate, incrassate, consolidate, lenify, and to be agreeable to the Nerves and Lungs; hence they are used against Coughs, Consumptions, Spitting of Blood, and other Affections of the Lungs; against a hot Intemperature of the Liver, and a Colic. Externally they maturate, and break Carbuncles, consolidate Wounds, particularly of the nervous Parts, heal Ulcers, mitigate Inflammations, restrain Hæmorrhages, and make hydropical Tumours of the Belly and *Scrotum* to subside. The Shells act as Absorbents; but when calcin'd are a Sort of Lime.

Cochlea minor ex lutea & nigro variegata, Offic. The *Paris Garden Snail*. This is frequent in the Gardens at *Paris*, the Shell is used in *Collyria*.

Cochlea aquatica, Offic. The *Water Snail*, or *Periwinkle*. This agrees in Virtues with the common Snail.

Cochlea cæolata, Aldrov. de Exang. This is a Species of Sea Snail, found in the *Mediterranean Sea*. Its *Operculum*, or Covering, is according to some, the *Umbilicus marinus* of the Shops, which is said to stimulate to Venery.

Columba, Offic. The Pigeon, or Dove. The Parts in Use are, the living Pigeon, the Blood, the Coat of the Stomach, and the Dung. The live Pigeon, dissected in the Middle, and applied to the Head, while the Blood is hot, mitigates the Violence of the Humours, and discusses Melancholy and Sadness; whence it is a very convenient Remedy in the Phrensy, Head ach, Melancholy, and the Gout. The warm Blood, instill'd into the Eyes, helps Pain and Lippitude, discusses Catarrhs and stagnated Blood, cures recent Wounds, has a peculiar Virtue in stopping an Hæmorrhage from the Membranes of the Brain, and mitigates the Pain of the Gout. The Coat of the Stomach, dry'd and pulveriz'd, is recommended in the Dysentery. The Dung is violently heating, on which Account it is a Caustic, and Discutient, and excites a Redness of the Skin, by attracting the Blood thither; whence it is of frequent Use in stimulating Plaisters, and Cataplasms. Triturated and sifted, and applied with the Seed of Cresses, it relieves under inveterate Disorders, as the Gout, *Hemicrania*, *Vertigo*, Head-ach, and others; internally it waxes the Stone, and provokes Urine.

Concha, Offic. Shell Fish. This is a general Name comprehending a great many Sorts of Shell Fish. The Shells of these Fish in general, are drying, absorbent, correcting, and precipitating; for which Purposes, those beat to a fine Powder are preferable to those levigated on a Marble with Water, which are commonly called *Concha Preparata*. What are usually kept in the Shops, under this Title, are the Shells of Muscles, and are recommended for exciting a *Diaphoresis* in Intermitting Fevers, if a Scruple, or half a Dram is exhibited, about an Hour before the Paroxysm, in *Carduus* Water, or that of the lesser Centaury; ordering the Patient, at the same time, to be kept warm, in order to encourage a *Diaphoresis*. But, when the Shells are calcined, they become Lime, and do not absorb and correct, but stimulate and resolve, in Consequence of the Acrimony they have acquired by Calcination. In this Case they are so far from correcting the Acrimony of the Juices, that they rather increase the Heat of the Stomach and *Fauces*. *Olaus Wormius*, in his *Museum*, informs us, that the Ashes of Shell-fish are possess'd of a caustic Quality; that they are recommended against Leprosies, Freckles, and Spots of the Skin; that when they are previously washed, like Lime, they cure Ulcers, and Eruptions on the Head; and that, in the *Netherlands*, they are used as a Cure for the *Hæmorrhoids*. *Pliny* describes their detergent Quality in the following Words: "The Ashes of the Shells of Fish, if used by way of Ointment, with Honey, remove Spots in the Faces of Women in seven Days time, render the Skin smooth, and on the eighth, the Part is to be anointed with the Whites of Eggs."

Concha Venerea, or *Veneris*. This

is what we call *Venus's Shell*. It is a Fish, whose Shell is univalve, wreath'd, and has a small longitudinal and denticulated Chink or Aperture in it. That this Species of Shell Fish, was used by the Antients, as an Aliment, we read in *Seneca*, *Epist.* 95. *Mundius* asserts, that they prove a *Stimulus* to Venery, and provoke Urine. *Rondeletius* informs us, that they are good to remove Fluxes, and cure Ulcers of the *Uterus*. Excellent Dentrifices are prepared from this Species of Shell; which is also useful for curing Ulcers in the *Canthus* of the Eye, and the *Fistula Lachrymalis*. It is remarkably drying, without exciting any Heat. *Wormius* informs us, that he has heard Spoons of these Shells highly commended for curing the Chin Cough in Children, if they sup Broths, or other proper Liquors with them. The Powder of these Shells is possess'd of an absorbent drying Quality, and is said to be a Cure for the *Yaws*.

Coracinus, Offic. The Crow Fish. This is a Fish mentioned by *Galen*, *Aldrovandus*, and *Bruyserinus*. It is found in Rivers, particularly in the *Nile* and the *Mediterranean* Sea. Certain Bones, found in the Head of this Fish, are said to be possess'd of some Medicinal Virtues: They are called *Lapides Coracini*, and are recommended against nephritical and colical Pains, and the Jaundice.

Cornix, Offic. The Carrion Crow. The Dung of this Bird is used, which taken in Wine, is recommended for the Cure of a Dysentery.

Corvus, Offic. The Raven. Young Ravens, calcin'd to Ashes, are recommended against the Epilepsy, Gout, and that Species of Leprosy called *Alphus*. The Brain is also taken Notice of among the Remedies for an Epilepsy. The Fat and Blood are said to render the Hair black.

black: The Dung, suspended about the Necks of Children, is reported to ease their Coughs, and procure them an easy Dentition.

Coturnix, Offic. The Quail. The Fat is said to be good for Specks in the Eyes; and as this Bird is said to feed upon Hellebore, the Dung is said to be a Kind of a Specific in an Epilepsy.

Crabro, Offic. The Hornet. It is recommended in a Drench for that Disorder in a Horse, which *Vegetius* calls *Scrofula*, meaning, I believe, what we call the Strangles. The Sting of the Hornet is very troublesome, making the Part affected to swell very much, with an excessive Pain. I should apprehend, that anointing it with Oil of Olives, would be the most effectual Remedy.

Crangon, Offic. The Prawn. This Fish is esteemed extremely nourishing, and therefore good in Consumptions.

Crocodilus, Offic. The Crocodile. This is found in the River *Ganges*, the *Nile*, and other large Rivers. The Blood and Fat of this Animal are used. The Blood is said to clear the Sight; and the Fat is recommended for Wounds and Cancers.

Cuculus, Offic. The Cuckow. The whole Bird and its Dung, are used in Medicine. The Bird burnt whole, is recommended for the Gravel, Pains of the Stomach, and excessive Humidity of the same Part. It is given with good Success also in the Paroxysms of Fevers. The Dung of the Cuckow drank, as is said, cures the Bite of a Mad Dog.

Cuniculus, Offic. The Rabbit. The whole Animal, its Fat, and Brains are used. A Rabbit calcin'd whole, is said to cure a Quinsey, or Inflammations of the *Fauces*. The Fat is used for resolving the Indurations of the Tendons and Joints, and the Brains are said to resist Poisons.

Cygnus, Offic. The Swan. The

Fat of the Swan is used, which is esteem'd emollient, attenuating, and lenient, and is therefore said to be good for the Piles, and Indurations of the *Uterus*. Mixed with Wine, it removes Freckles of the Skin, if these are anointed with it. The Skin of a Swan is sometimes directed to be applied to the Parts affected with a Rheumatism. It is said to fortify the Nerves and Stomach, to dispel Flatulencies, and to assist Digestion, when applied to the Stomach.

Dama, Offic. The Fallow Deer. As this Animal lives entirely on Vegetables and Water, the Salts are not highly exalted; nor is it much inclined to alkaline Putrefaction, on account of its Aliment. But the habitual Exercise of the Animal exalts and volatilizes the Salts in some Degree. The Venison of a Deer, kill'd when cool, differs very much from that of one kill'd when heated with Exercise: The Fibres of the first are more hard, the Flesh more tough, and consequently less easily dissolvable in the Stomach. The second is more tender, more dissolvable, but has a greater Tendency to an alkaline Putrefaction, which however, may be, in a great Degree prevented, by suffering the Deer to bleed plentifully when killed; as the *Jews* were directed to do with Respect to all Sorts of Beasts and Fowls in *Leviticus*. The recent Blood of this Deer, drank immediately after being taken from the Vein, is said to remove Dizziness of the Head. The Gall is said to be deterfive, to cure Dimness of the Sight, and take away Films of the Eyes. The Liver is recommended against a Diarrhæa, and the Horns agrees in Virtues with Hartshorn.

Delphinus, Offic. The Dolphin. This is found in the *British* Ocean, and in other Places. The Belly, Liver, Ashes, and Fat are used.

The

The Belly dried, tritured, and exhibited in some proper Liqueur, is said to cure Splenic Patients. It is said, that the Liver roasted, and used with Aliments, perfectly cures Tertian and Quartan Fevers; as also, that Species of nocturnal Fever known by the Name of *Typhus*. The Ashes, are by *Pliny*, enumerated among the Medicines which cure the Ringworm and Leprosies. According to the same Author, the Fat melted, and drank with Wine, cures dropical Patients.

Dentalium, Offic. The Dog-like Tooth Shell. This is a small Shell, or oblong conical Tube, of a white Colour, which incloses a Sea Worm. It is found on the Coasts of *England*, and is alkaline, absorbent, cordial, and astringent. There is another Kind of *Dentalium* found on the Coast of *Normandy*, which is no more than a small Heap of Sand, in which a Worm hides itself. It is not much used in Medicine; but what Virtues it possesses seem to be much the same as other testaceous Substances.

Dracomarinus, Offic. The Weaver. This Fish is taken in the *Mediterranean* Sea. The Parts used, are the Head, newly burnt to Ashes, and the Bones. *Rondeletius* affirms, that the Ashes of the Head, newly burnt, are good against all Poisons; and *Pliny* writes, that the Tooth-ach is eased by scarifying the Gums with the Bones of this Fish.

Ebur. Ivory. See *Elephas*.

Echinus marinus, Offic. The Sea Hedge Hog. It is taken in the main Sea: It is friendly, and beneficial to the Stomach and Belly, and provokes Urine. The crude Shell, roasted, is a good Ingredient in Medicines for absterging the *Psores*; and the Ashes of it burnt, cleanse foul Ulcers, and repress fungous Flesh.

Echinus ovarius, Offic. The great Sea Urchin. The Part used in Me-

dicine is called the *Lapis Judaicus*, or *Jews Stone* of the Shops, which is thought to be the Spines or Prickles of this Animal petrified.

Echinus terrestris, *Aldrov. de Quad.* The Hedge Hog, or Urchin. This Animal is found in Thickets, and Hedges. What is useful in Medicine, are the whole Animal, the Liver, the Feet, and the Ventricle. The Hedge Hog boiled, or burnt to Ashes, helps an involuntary Discharge of Urine, is grateful to the Stomach, and excites Excretions by Urine and Stool; externally it cures the *Alopecia*, being rubbed on the Part. The Liver, or the Body, dry'd, and taken in *Oxymel*, is effectual in nephritic Disorders, and cures a Cachexy, Dropsy, Convulsions, and *Elephantiasis*, and dries up Rheums in the Viscera. The Fat is most successfully used in a *Hernia*. The Membrane, or Coat of the Ventricle, is recommended for the Colic. The Decoction, or Broth of the Flesh, is very serviceable in the Dropsy, by provoking Urine.

Elephas, Offic. The Elephant. The two large Teeth in the superior Jaw, are the Parts of the Elephant principally used in Medicine, as well as Mechanics. It is called *Ebur*, Offic. Ivory. It is a Refrigerant and Drier; is moderately astringent, incising, and a Strengtheners of the Viscera: It stops uterine Hemorrhages, affords Relief in the Jaundice, expels Worms, is good for inveterate Obstructions, cures Pains and Weakness of the Stomach, and the Epilepsy, preserves from Melancholy, and resists Poisons and Putrefaction. *Eburustum*, Offic. *Spodium Arabum*, Burnt Ivory, is esteem'd an Astringent.

Encrasicolus, Offic. The Anchovy. Anchovies pickled with Salt, and kept in Barrels, and the whole Fish, as well as its Pickle, are used in Medicine; the Fish pickled is

apply'd like Herrings to the Soles of the Feet; and both their Pickles serve for the same Purposes. It helps Digestion, and fortifies the Stomach with its volatile and saline Principles, which cause a gentle and moderate Heat in that Part, and disperse and attenuate the Aliments that are contained therein.

Entalium, Offic. The Entaglia. It is a Shell much longer and thicker than the *Dentalium*. It is imported from the *East Indies*. It is but little used in Medicine; tho' probably, it may be serviceable for the same Purposes, and in the same Disorders, as other Substances of the testaceous Kind.

Equus, Offic. The Horse, or Mare. The Parts used in Medicine are the Blood, Rennet, Milk, Dung, Warts, (*Lichen*) Testicles, Fat, Hoofs, Hairs, Saliva, Teeth, the Stone found in the Stomach or Intestines, which, for its Figure and Structure, consisting of *Laminae*, is not unlike the *West-Indian Bezoar*. The Blood is mixed with Caustics and Septics: The Rennet, called *Hippace*, is particularly serviceable in the coeliac Passion, and the Dysentery. The Milk is thought to be good in the Epilepsy, *Phthisis*, Cough and Asthma. The Dung used externally, stops Hæmorrhages, and expels the dead Child and Secundines; internally, it is exhibited in the Colic, Strangulation of the Uterus, Pleurifies, and also for the Expulsion of the dead Child, and After-Birth; where that of a Stone Horse is most effectual. The Warts are particularly recommended in Hysterics, and for the Stone and Epilepsy. The Testicles are a present Remedy for expelling the Secundines, and are recommended in Colics. The Fat is used to good Purpose in anointing Luxations, and the Hairs repress an Hæmorrhage, the *Saliva*, or Spume of the Mouth, drank for three Days,

cures a Cough, and mitigates the violent Heat of the Fauces. The Teeth, when they first begin to appear, are said to facilitate Dentition in Infants. The Stone called the *Hippolithus*, is supposed to be endu'd with the same Virtues with the *West-Indian Bezoar*.

Equus marinus, Offic. The Sea Horse. The Parts used in Medicine are, the Pizzle, which is a round, bony Substance, a Cubit, or more in Length, thick, ponderous, and solid, and much thicker and rounder at the End, near the Gians; and the Teeth, which are great, long, thick, ponderous, hollow, and white. The Pizzle pulveriz'd, is used to expel the Stone; the Teeth for Service and Value, are compared to Ivory, and are made into various Forms, as into Rings for the Cramp, and for other Purposes.

Erinaceus. The Hedge Hog. See *Echinus terrestris*.

Erucæ, Offic. The Caterpillar. This is the *Fœtus* of a Sort of a Butterfly, and undergoes the same *Metamorphosis* as the Silk Worm, and at length passes into a Butterfly. There are many Species, but that which ought to be used in the Shops, is an Insect known to every body, that feeds upon Cabbage Leaves. Caterpillers bruised, or the Powder of them, raise a Blister like *Cantharides*, and take off the Skin. *Mouffet* says, they will cause the Teeth to fall out of their Sockets; and *Hippocrates* writes, that they are good for a Quinsy.

Felis. The Cat. See *Catus*.

Ficedula, Offic. The black Cap. This Bird eaten as Food sharpens the Eyesight.

Formica, Offic. The Ant. This is a small, oblong, red, or blackish Insect, arm'd with a Sting, and living in Swarms; the Male is wing'd, the Female destitute of Wings; the Animal and its Eggs, are used

in Medicine. They are heating and drying, and incite to Venery; their acid Smell mightily refreshes the vital Spirits. They are said to cure the *Psora*, *Leprosy*, and *Lentigo*. The Eggs are effectual against Deafness, and correct the Hairiness of the Cheeks in Children, being rub'd thereon.

Formica major, Offic. The Horse Ant. This Insect provokes to Venery, and the Oil thereof, by Infusion, is good for the Gout and Palsy.

Fulica, Offic. The Coot, or Bald-Coot. The Heart is recommended against Epilepsies; and the Flesh is said to be good for the Poison of Serpents.

Galbula, Offic. The Yellow Hammer. *Pliny* commends this Bird for the Jaundice.

Galerita. The crested Lark. See *Alauda cristata*.

Galeus. The Name of a Sea-Fish, called also *Mustelus Spinax*, Offic. The Hound-Fish, falsely called Seal. It is an Inhabitant of the cavernous Places of the Sea; and its rough Skin is of Use to Artificers in polishing Alabaster, Marble, and other things, the Flesh is highly *alcalescent*, and consequently proper where Acidities abound.

Gallina aquatica, Offic. The common Water Hen, or Moor Hen. It is commonly found in Fish-Ponds. The Parts used in Medicine are, the Craw, the Feathers and their Ashes. The Craw is recommended in the *Asthma*; the Smoke of the Feathers is suppos'd to be good for Hysteric Fits, and their Ashes dry up old Ulcers and Fistulas.

Gallina domestica, *Gallus*, Offic. The Cock and Hen. The Parts used are, the whole Bird, the Brain, the Coats of the Ventricle or Craw, the Testicles, the Gall, the Fat, the Throat, the Dung, and the Eggs. An Hen slit, and apply'd to the Head while the Blood is hot, is of good

Effect in the Phrensy, *Cephalalgia*, and other Disorders of that Part: It is also said to cure the Bites of venomous Animals, being used in the same Manner. Laid on a Carbuncle, it draws out the Poison; and, what deserves Observation, stops an Hemorrhage in recent Wounds, being apply'd thereto: The living Hen, stript of its Feathers about the Anus, and apply'd, extracts the Poison of *Buboes*. The Brain is of an *incrassating* Quality, and stops Fluxes. The inner Coat of the Ventricle, extracted, dry'd, and pulveriz'd, has a Virtue of binding and strengthening the Stomach, and by that Means, of restraining Vomiting and Fluxes of the Belly; and is, also, a Lithontriptic. The Testicles of the Cock are said to have a wonderful Effect in restoring lost Strength in Diseases, in supplying prolific *Semen*, and venereal Vigour. The Gall deterges Spots in the Skin, being rub'd thereon, and is good for the Eyes. The Fat of Hens and Capons, heats, moistens, mollifies, and is lenitive, and of a middle Nature between the Fats of a Swine and a Goose, correcting Acrimony: It is of Use in Fissures of the Lips, Pains of the Ears, and Pustules of the Eyes. The Throat of a Cock burnt, and not consum'd, but scorch'd and dry'd, and given at Night before Supper, cures involuntary nocturnal Discharges of Urine, by a specific Property. The Dung is said to perform all the same Effects as Pigeons Dung, tho' in an inferior Degree; but it is particularly useful in Pains of the Colon and Uterus; it is, also, efficacious in the Jaundice, Stone, and Suppression of Urine; the white Part of the Dung is observ'd to be the best. The Ashes dry up Achors of the Head, and other running Sores, being sprinkled thereon: The brown Part of the Dung consolidates an Exulceration

of the Bladder. The Eggs afford, for medicinal Uses, the Shells, Membranes, *Albumen*, and Yolk: The Shells are lithontriptic, and are endu'd with the Virtue of inciding a tartareous Mucilage: The Membranes have a diuretic Quality, used either inwardly or outwardly, and are apply'd to the Prepuce of Infants: The *Albumen* is refrigerating, astringent, and agglutinating, and is of frequent Use in Redness of the Eyes, and in Conglutination of Wounds (with the common Bole). In Fractures, and the like Cases, it is, also, of Service for *Anacollemas*. *Hippocrates* exhibited three or four Whites of Eggs to Persons in a Fever, as a Refrigerant and Expellent: The Yolk of an Egg has an anodyne, maturating, digesting, and relaxing Virtue; for which Reasons, it is a very frequent Ingredient in Clysters, and mixt with a little Salt, is usually apply'd, in the Shell of a Walnut, to the Navel of Infants, to provoke Excretion of the *Fæces*. The white of a new laid Egg raw, pretty much resembles the *Serum* of the Blood, and is the Nutriment, from which all the solid Parts of the Chicken is form'd; hence 'tis perhaps, the very best Nutriment, where a Weakness of the digestive Organs prevails. The best Way of taking is, to beat it up with a little Sugar, and drink it with equal Parts of Milk and Water.

Gallinago, Offic. The Woodcock. The Ashes of this Bird, burnt, are said to be lithontriptic. The Woodcock consider'd as a Food, is said to be nourishing, strengthening, and restorative. The Salts of this Bird are highly exalted by their habitual Exercise, which renders it a very proper Aliment, where there is a Redundance of Acid.

The *Gallinago minor*, is the Snipe or Snite, which agrees with the preceding in Virtues, except that it is

more easily digested, and esteem'd more delicate to the Taste.

Garum. The Pickle of the Anchovy, is so called. See *Encrasi-cholus*.

Gazella. The Bezoar Goat. See *Bezoar*.

Glis, Offic. The Rell or Rell Mouse. The Flesh if eaten, is said to cure the *Bulimia*; if the Soles of the Feet are anointed with the Fat, it is said to procure Sleep; the Excrements, drank in any convenient Vehicle, have the Reputation of dissolving the Stone; and mixed with Vinegar and May Dew, cure an *Alopecia*, the Part affected being anointed therewith; the Ashes clear the Sight.

Glossopetra. See *Canis Carcharias*.

Glottis, Offic. The Great Plover. This is found about watery Places, and the Gall is used, which is said to be good in Disorders of the Eyes. A Jelly made of the Flesh of this Bird, is by some esteem'd an Analeptic.

Gobius. The Gudgeon. This Fish affords good Nourishment, produces good Juice, is easy of Digestion, and provokes Urine. Several Authors affirm, that People recovering from Sickness may eat it. It contains much Oil and volatile Salt.

Gobius niger, Offic. The Sea Gudgeon, or Rock Fish. It is taken among the Rocks by the Sea Shore. Broil'd and eaten without Salt, it cures the Dysentery, Lientery and *Tenesmus*. It is said to be good for the Bites of Serpents and Dogs.

Graculus, Offic. The Cornish Chough. This Bird is found in Cornwall, and many other Places. Externally apply'd it is said to resolve Tumors, and to be good against scrophulous Swellings.

Grus, Offic. The Crane. The whole of this Bird, its Fat, its Gall, its Head, its Eyes, its Stomach, and

the

the Marrow of its Legs, are used. The Bird itself, because nervous, is said to be highly beneficial to the nervous and membranous Parts; hence the Use of it is recommended in Colic Pains. Its Fat, if dropt into the Ears, lessens Deafness, softens Hardness, and obstinate Tumors of the Spleen; it quickly relieves a Stiffness of the Neck, and is said to be of the same Nature with the Fat of a Goose. The Gall is beneficial to the Eyes. The Head, Eyes, and Stomach, when reduc'd to a Powder, are sprinkled upon Fistula's, Cancers, and varicose Ulcers. An ophthalmic Ointment is prepar'd of the Marrow of the Legs.

Gryllus, Offic. The Cricket. This is an Insect with Wings, of a rusty Colour, an Inhabitant of the Fire, and highly officious with its squeaking Notes. The Ashes of it exhibited, are said to be diuretic; the express'd Juice, dropt into the Eyes, is a Remedy for Weakness of the Sight, and alleviates Disorders of the Tonfils, if rub'd on them.

Halcedo. A Name for the *Ispida*, or King's Fisher.

Halec, Offic. The Herring. The Parts of this Fish, used in Medicine are the Vesicles, called *Anima*, and the entire Fish. The *Anima* are said to excite Urine, taken internally. Salted Herrings are sometimes apply'd to the Soles of the Feet in Fevers, with an Intent to derive the Humours from the Head, and mitigate the febrile Heat. The Pickle of Herrings is used in Clysters, for Pains in the Hips, and a Dropsy; externally apply'd, it mundifies fetid Ulcers, stops the Progress of a Gangrene, and dissipates strumous Swellings. It is also, of Service in a Quinsey, if the Parts affected are anointed with this and Honey, mix'd together.

Hippocampus, Offic. The Sea Horse. It is taken in the *Mediter-*

ranean Sea. The Ashes of the burnt Fish, mixed with Tar or Fat, or *Unguentum Amaracinum*, and the Part anointed, cures an *Alopecia*. It is a Remedy against the Bite of a mad Dog.

Hippolithus. A Name for a Stone found in the Stomach, or Intestines of a Horse. See *Equus*.

Hippopotamus, Offic. The Sea Horse, or rather River Horse. The Teeth and Testicles of this Animal are used in Medicine; the Testicles dried and triturated, are drank against the Bites of Serpents. The Teeth, made into Rings, are supposed to be of great Virtue against the Cramp.

Hircus. The Goat. See *Caper*.

Hirudo, *Sanguisuga*, Offic. The Leech. There are two Sorts of Leeches, found in fresh stagnating Waters. The smaller of these are prefer'd for medicinal Purposes, as making a less Wound, and consequently more easy to be stoppt. They are only used for taking away Blood, and with this View they are apply'd to the Temples, under the Ears, to the *Anus*, Feet, Arms, and many other Parts.

Hirundo, Offic. The Swallow. The whole Bird, its Heart, Blood, Nest, and Dung, are used in Medicine. Swallows, with their Young, burnt to Ashes, are a Specific in the Epilepsy, and for Dulness of Sight, and Lippitude, if made into a *Litus* with Honey; they also cure the Quinsey, and Inflammations of the *Uvula*. The Heart also, is said to be good against the Epilepsy, and to strengthen the Memory; some eat it against a Quartan. The Blood is thought to be of singular Benefit to the Eyes. The Nest helps the Quinsey, and cures Redness of the Eyes, and heals the Bite of a Viper, if apply'd to the Place. The Dung heats mightily, and discusses, being of an acrimonious Quality. It is of excellent Service against the Bite of a mad

mad Dog, in the Colic, and nephritic Disorders, and excites the Belly to Excretion. *Celsus* tells us that it was commonly said, "That whoever eats a young Swallow, shall be free from all Danger of a Quinsy for a whole Year."

Hirundo Indica, Offic. The Indian Swallow. It is found in the maritime Places of *China*. Its Nest, which is the Part used in Medicine, is of an hemispherical Figure, of the Size of a Goose's Egg, pellucid, and in Substance resembling the *Ichthyocolla*. It stimulates to Venery. In *China* these Nests are esteem'd delicious Food.

Hirundo riparia, Offic. Schrod. The Sand Martin. The whole Bird and its Blood are used in Medicine, which agree in Virtue with the common Swallow.

Homo, Man, is not only the Subject of Medicine, but contributes with his Body to the *Mrteria Medica*. Officinal Simples, furnish'd from the Parts of the human Body, whilst alive, are the Hairs, Nails, Saliva, Ear Wax, Sweat, Milk, Menfes, Secundines, Urine, Dung, Semen, Blood, the Stones of the Bladder, which are the *Bezoar Microcosmi*, and the Membrane which covers the Head of the *Fetus*. The Hair is commended for the Production of Hairs, for the Jaundice, Luxations, and for stopping an Hamorrhage. The Nails are said to provoke Vomiting, and to be an Hydragogue in Dropsies. The Saliva of a Man fasting is recommended against venomous Bites, as those of Serpents, a mad Dog, and the like. The Ear-Wax is said to be a present Remedy in the Colic; outwardly used, it cures the Stings of Scorpions, conglutinates Wounds, and Hissures, and Cuts in the Skin. The Sweat is said to be effectual against the *Scrophula*, if it be mixed with the Herb

and Root of Mullein, and wrapt up in the Leaf, and so applied to the Place. The Menstrual Blood, of the first Flux, dried, is commended, taken inwardly, for the Stone, and the Epilepsy: Externally used, it eases the Pains of the Gout; it is also said to be of Service in the Peffilence, Abscesses, and Carbuncles; it cures the Erysipelas, and cleanses the Face from Pustules. The Secundines are extol'd for removing stumous Tumors in the Throat, against the Epilepsy, and for invalidating the Effects of *Philtrea*, or Love Potions; for exterminating a Mole and a dead *Fetus*, and for destroying noxious Vermin. The Urine heats, dries, resolves, absterges, discusses, cleanses, resists Putrefactions; and is, therefore, of principal Service in Obstructions of the Liver, Spleen, Gall Bladder, in the Dropsy, Jaundice and as a Preservative against the Plague. A Draught of the Husband's Urine, which the old Women call *Water of Castor*, is said to facilitate the Delivery of the Wife in hard Labour: Outwardly used, it dries the Habit, dissolves Tumours, cleanses Wounds, even though poison'd, prevents a Gangrene, loosens the Belly, absterges Scurf from the Head, mitigates the Paroxysms of Fevers, cures Exulcerations of the Ears, helps Redness of the Eyes, removes Tremblings of the Limbs, discusses Tumors of the *Uvula*, and eases Pains of the Spleen: There is prepared of it a *Sal Ammoniac*, which is an artificial striated Salt, made into Cakes, of a white Colour, and of a bitterish pungent Taste; the Method of Preparation is, by boiling together Urine, Soot, and common Salt: Chuse what is pure and white. There seem to be some Footsteps of a natural *Sal Ammoniac*, in *Diescorides*, *Pliny*, and other antient Authors, who describe it, as found under the Sands.

Sands of *Lybia*; but no such thing is to be found in the Shops at present; nor is it known what it was. Human *Dung* is mollifying, maturing, and anodyne; whence it is very serviceable in mitigating Pains excited by Charms, for ripening pestilential Carbuncles, and for a Phlegmon, particularly of the Throat, as in a Quinsey; and to prevent an Inflammation in Wounds: Some even prescribe it inwardly for the Quinsey, to repress the Paroxysms of Fevers, and for the Epilepsy. The *Semen* or *Sperm*, is whimsically used by some for dissolving the malific Influence of Spells, causing Impotence; and of the same is prepared a magnetic Mummy, which serves for a Philtre. The *Blood*, drank recent and hot, is said to be effectual against the Epilepsy, if the Patient afterwards uses the vehement Motion of running till he sweats; it stops all Sorts of Hæmorrhages: Used outwardly, it also represses all Eruptions of Blood, and especially from the Nose. The *Stone* in the human Bladder dissolves the Stone, and all tartareous Matter in any Part, and expels the same; for which Reason, it frees from all Obstructions. The *Membrane*, which sometimes surrounds the Head of the *Fætus*, is said to be of extraordinary Efficacy against the Pains of the Colic. Official Simples, taken from the human Carcase, are the *Mummy*, which is a resinous, harden'd, black shining Surface, of a somewhat acrid and bitterish Taste, and of a fragrant Smell. Under the Name of *Mummy* are comprehended, first, the *Mummy* of the *Arabians*, which is a Liquament, or concreted Liquor, obtain'd in Sepulchres, by Exudation from Carcases embalm'd with Aloes, Myrrh, and Balsam. If this *Mummy* could be procured right and genuine, it would be preferable to the other Sorts. The second Kind of *Mummy* is the *Egyptian*, which is a Liquament of Carcases, season'd with *Pissasphaltus*. A third Substance, which goes by the Name of *Mummy*, is a Carcase torried under the Sand, by the Heat of the Sun: but such a one is seldom to be met with in our Country. The other Parts useful in Medicine are, the Skin, Fat, Bones, Marrow, *Cranium*, and Heart. *Mummy* resolves coagulated Blood, and is said to be effectual in purging the Head, against pungent Pains of the Spleen, a Cough, Inflation of the Body, Obstructions of the *Menses*, and other uterine Affections: Outwardly, it is of Service for consolidating Wounds. The Skin is recommended in difficult Labours, and hysteric Affections, and for a Withering and Contraction of the Joints. The Fat strengthens, discusses, eases Pains, cures Contractions, mollifies the Hardness of Cicatrices, and fill up the Pitts left by the Measles. The *Bones* dried, discuss, astringe, stop all Sorts of Fluxes, and are therefore useful in a Catarrh, Flux of the *Menses*, Dysentery, and Lientery; and mitigate Pains of the Joints. The *Marrow* is highly commended for Contractions of the Limbs. The *Cranium* is found by Experience, to be good for Diseases of the Head, and particularly for the Epilepsy; for which Reason, it is an Ingredient in several anti-epileptic Compositions. The *Os triquetrum*, or triangular Bone of the Temple, is commended as a specific Remedy for the Epilepsy. The *Heart* also cures the same Distemper.

Hystrix, Offic. The Porcupine. It is found in the Province of *Caragu*, and is of the Size of a Pig eight Months old. The Parts used in Medicine, are the whole Animal, and the Stone, called *Pedro del Porco*, found in the Gall Bladder, called also, by the various Names of *Bezoar Hystricum*, *Lapis Hystricis*, *Lapis Malacensis*,

laccensis, *Lapis Porcinus*, Mont. Exot. and *Lupis seu Pila Hystricis*, Ind. Med. This Part is rather to be called an *Ægagropila*, than a Stone, as consisting of a woolly Kind of Fibres, and a reddish, bitterish, and friable Matter, with its Outside cover'd in some Parts, with a Kind of blackish Scales, like Nails. It has neither *Laminae* nor Membranes, and is neither ponderous nor smooth, like the Bezoar, but light, and somewhat like the *Ægagropila*. This Animal seems to be possess'd of the same Virtues as the *Echinus terrestris*. Dr. *Tancred Robinson* observes, that it is esteem'd an excellent Alexipharmic.

Ibex, Offic. The Stone Buck. This Animal is found in the highest Parts of the *Alps*. *Gesner* recommends the Blood taken in Wine, against the Stone. The Dung is said to be good in Arthritic and Ischiadic Pains. And *Scraphinus* ascribes the same Virtues to the *Coagulum*, or Runnet, as to that of the Hare.

Ichneumon, Offic. The Egyptian Rat. The Part of this Animal principally used in Medicine is the Dung, which, together with Mustard Seed, and Vinegar, is esteem'd a good Topic in the Gout; and is said to be sudorific, to be good for the Colic, and venomous Bites, and to purify the Blood.

Ichthyocolla, Offic. The Isinglass Fish. The Glue of this Fish, commonly called *Isinglass*, is used, and is of a yellowish Substance, made up in a spiral Form, of a glutinous Consistence, and of no Smell. It is prepared of the Skin, Intestines, Stomach, Fins and Tail of this Fish, in the following Manner. These Parts of the Fish, when cut in small Pieces, are macerated in a sufficient Quantity of Water: Then they are boiled over a slow Fire, to the Consistence of a Poulitice; after which they are to be moisten'd, and spread into Pellicules, before they become

cold, and reduced to a hard Mass. This Substance, according to *Schroder*, is of a drying, incarning, and, in some Measure, of an emollient Quality; it inspissates the Blood, and is of an anodyne Nature: It is used in Exulcerations of the Lungs and Fauces, and in a *Fluor Albus* it is exhibited with Success: Some also prescribe it in Dysenteries. It is of a conglutinating Nature, when externally applied.

Isipida, Offic. The King's Fisher. It is found about Rivers. The Heart is used, which dry'd, and hung about the Neck, prevents Epileptic Fits in Children.

Julius, Offic. The Rainbow Fish. This Fish is frequently found about *Genoa*. The Broth thereof loosens the Belly, and is diuretic, *Pliny* and *Orbasius* esteem'd this Fish as good Food.

Julus, Offic. The Gally Worm. This is a terrestrial Insect, furnished with many *Annuli*, or Rings, and creeping on many Legs, and rolling itself up, when touched. It is common in Gardens. *Charlton* recommends it, taken in Wine, against the Jaundice, and Difficulty of Urine.

Kermes, five *Chermes*, Ind. Med. *Grana Chermes* & *Coccus Baphica*, Offic. *Chermes*, *Grana Tinctorum*, *Coccus Baphica*, *Coccum insectorum*, Mont. Exot. Kermes Berries. This Grain is found adhering to the Branches, but rarely to the Leaves of the *Ilex aculeata cocciglandifera*. It is of a spherical Figure, as large as a Pea, or Lentil, smooth, shining, and of a blackish brown Colour. After the most diligent Scrutinies of the Naturalists into this Matter, 'tis now certain, that the Production of this Grain is owing to a certain Insect, or small Worm; and that it is, in Reality, nothing but a certain *Nidus* or Follicle, fill'd with the numerous Progeny of that Animalcule. *Marsigli* affirms, that the Substance of

Kermes Grains is richly impregnated with a volatile Salt, of an alkaline Nature. *M. Geoffroy* also, upon distilling *Kermes* Grains by the Retort, obtain'd urinous and volatile Liquors, which, when pour'd into the Tincture of Turn-sole, produc'd no Change, but tinged the Tinctures of Roses and Violets with a greenish Colour. From one Pound of *Kermes* he obtain'd half an Ounce of pure concreted volatile Salt, and about a Dram or two contaminated with a yellowish Oil. A large Quantity of fetid Oil was yielded, which was not black, but of a deep yellow Colour, and thick like Butter. Hence he concludes, that the Principles of the *Kermes* can be more properly compared to nothing, than to the Products yielded by crude Silk, when chymically examined. As for the Medicinal Virtues of the *Kermes*, *Dioscorides* describes them in the following Manner: This Substance is of an inspissating Quality; and when triturated with Vinegar, is highly proper for anointing Wounds, and cut Nerves. *Matthioli*, from *Galen*, informs us, that the *Kermes* is possessed of an astringent, and, at the same time, of a bitter Quality, both of which dry without creating Pain; for which Reason it is proper in large Wounds, especially those of the Nerves; for which Purpose some triturate it with Vinegar, and others with *Oxymel*. *Pliny* informs us, that it is to be laid upon recent Wounds, triturated with Vinegar; upon the Eyes, when affected with Defluxions, triturated with Water; and to be dropt into inflamed Eyes. From these Passages it is obvious, that the Antients thought *Kermes* proper in Cases where the Use of astringent, and consequently of inspissating and repelling Medicines was indicated. The Moderns, with the *Arabians*, ascribe a highly corroborating and cordial Quality to the *Kermes*. The

Cloth dyed with these Grains, commonly called Crimson, or Scarlet Cloth, is also highly extoll'd, on account of these Qualities, and is, for that Reason, used not only for bringing forth the Measles, by wrapping the Patient in it, but also for corroborating the Heart, by the Application of Epithems, wrapt up in it, to the Region of that Organ. The Application of a Piece of this Cloth, is also thought good for curing Venereal Buboës. *Schroder* in his *Pharmacopœa*, informs us, that it is a common Practice to tie a silken Thread of this Colour, about the Parts affected with an *Erysipelas*, in order to remove that Distemper. *Simon Paulli*, in his *Quadripartitum Botanicum*, affirms, that the Eruption of the Measles is greatly promoted in Children, by wrapping them up in this Cloth; and that he has seen it successfully applied, by Men of Skill, to Venereal Buboës. For preventing Abortion, and strengthening the *Fetus*, some Women use, as an infallible Remedy, a Belt of this Sort of Cloth next their Skins, all the Time of their Gestation. Others use the like Belt for suppressing an immoderate Flux of the *Menses* and Hæmorrhoids. *Ludovici* in his *Pharmacopœa*, insinuates, that these external Applications, are none of the best and most effectual. "To add, says he, the Knap of Scarlet Cloth to medicated Bags and Epithems, is a Practice more ostentatious than useful: To tie up bleeding Parts with a Scarlet Thread, or to sollicit the Eruption of the Measles, by wrapping the Patient in Scarlet Cloth, seems a Practice only worthy of ignorant Women." And *Hoffman*, in his *Clav. Schroder*, informs us, that, when Scarlet Cloth is used for promoting the Eruption of the Measles, the Effect must rather be produc'd by the Force of the Patient's Imagination, than

than any expulsive Virtue lodged in the Cloth itself. Nor according to *Lanxoni*, does a Scarlet filken Thread, tied about the Part, remove the *Erysipelas*. If we consider that the Principles which compose an Animal Body, have a Tendency to an *alcalescent* Disposition; if also we consider that the *Animalcules* of the *Kermes* Grain, as yet retain some Properties of the Substance by which they were nourish'd, especially the *astringent* Qualities peculiar to the Juice of the Shrub, we cannot deny that the *Kermes* Grains contain very considerable Virtues, which is indicated by their bitter and *astringent* Taste; in Consequence of which Quality it is corroborating, and calculated for removing the Laxity of the Fibres, and correcting the Pec-
cancy of the *acescent* Humours. It is also obvious, that the *saline alkaline* Substances it yields in a *chymical* Distillation, are proper in Disorders, where an Acid is to be corrected and subdued. Hence 'tis evident, whether we use the *alkaline* Salts produced by the Fire, or the unchanged Substance of the Grains, that they are only to be commended as excellent Corroboratives, and Cordials, in particular Cases; but not in every Case indiscriminately; and without having a Regard to the predominant Fault in the Constitution. Hence the Reason is plain, why the Powder of *Kermes* Grains, in a poach'd Egg, with the Addition of a little *Frankincense*, or *Mattick*, is successfully used by the *Italian* and *Portuguese* Women, for preventing a *Miscarriage*; and why, according to *Clusius*, the Powder of *Kermes* is properly exhibited to the Women of *Montpelier* in difficult Labours, and Loss of Strength; for by corroborating Medicines, 'Abortion is prevented, where the Fibres, in too lax a State, are to be braced, that they may not lose what ought to be retain'd. The

Expulsion of the *Fœtus*, on the other Hand, is promoted by increasing the *contractile* expulsive Force of the Parts, which depends on the Corroboration of their constituent Fibres. As for the Medicinal Virtues of Scarlet, or any other red Cloth, the deeper the Cloth is tinged with a strong and lively red, the more powerfully it reflects the Heat sent from the Part to which it is applied. Hence its medicinal Effects are owing to its heating Quality, since it neither absorbs nor dissipates, but powerfully reflects the Heat it receives. The same is applicable to the Scarlet Silk Threads.

Lacertus, Offic. The Lizard, or Eft. It lives in Caverns, and Ruins, and desolate Places. The large green Lizard is esteem'd above the rest; but, this being rarely found in these Countries, what we say is to be understood of the common Lizard. Being cut in Pieces, or bruised, especially the Head, and applied with Salt, it extracts Splinters, Pieces of Glasses, and the like, out of the Flesh. The Flesh, or the Ashes of it, burnt, made into a *Litus*, with Fat, cure an *Alopecia*: It is also good against the Sting of a Scorpion, and the Bite of other venomous Creatures.

Lacerta viridis, Aldrov. de Quad. Ovip. The green Lizard. It is larger than the common Lizard, and found in Ireland; the Animal itself is used, and agrees in Virtues with the preceding.

Lacertus aquatilis, Offic. *Salamandra aquatica*, Raii Synop. The Water Eft. It is found in stagnant Waters. The Powder is good for facilitating the Extraction of Teeth.

Lampetra, Offic. The Lamprey, or Lamprey Eel. It is frequently found in large Rivers, and in the Sea. The Flesh is used, which is esteem'd very nourishing, and provocative to Venery.

Larus, Offic. The Cuddy Moddy. The Brain, Heart and Stomach, are used in Medicine. The Brain dried, cures an Epilepsy, according to *Cælius Aurelianus*. The Heart is said to facilitate Delivery; and the Stomach to help Digestion.

Leo, Offic. The Lion. The Fat only is in Use; which, washed and put into the Ears, eases the Pains thereof, and is successfully used to anoint Limbs benumbed with Cold: Some use it for scirrhus Tumours, and Chilblains.

Leopardus. The Leopard. See *Pardus*.

Lepus, Offic. The Hare. However delicious the Hare may be esteem'd among the modern Britons, our Ancestors thought it a Crime to taste it, as we learn from *Cæsar*; and in this they agreed with the *Jews*. Tho' the Hare lives on Vegetables and Water only; yet the habitual Exercise of this Animal exalts its Salts, and renders it somewhat alcallescent; and this Tendency is much increas'd, if it is killed immediately after being heated by strong Exercise: The Ashes, Head, Eyes, Blood, Lungs, Brain, Heart, Liver, Gall, Kidneys, Testicles, Uterus, Coagulum, Fat, Dung, Hair, and the Bone called *Astragalus*, are used in Medicine. The Ashes of the entire Hare, burnt to a Blackness, or of the whole Skin, are recommended in the Stone, an *Alopecia*, and Chilblains, apply'd externally in the two last. The Head cures an *Alopecia*, and whitens the Teeth. The Eyes are esteem'd effectual for promoting Delivery, and for expelling the Secundines, and a Mole: The Blood cures Freckles and Pimples of the Face; and is said to be good in a Dyfentery; the *Cœliac* Passion, and the Stone; the Lungs are good for an Asthma, Epilepsy, and for Chilblains; as a Topic, the Brain rubb'd on the Gums of Child-

ren, facilitates Dentition, and is good for Tremors of the Limbs; the Heart cures the Epilepsy, Pains of the Uterus, and a Quartan; the Liver moderates a *Diarrhœa*, and hepatic Flux; the Gall is good for an *Ophthalmia*, and the Tooth-ach. The Kidneys and Testicles are given for the Stone, to promote Conception, for Incontinence of Urine, and Disorders of the Bladder. The Uterus also promotes Conception; the Coagulum or Rennet, dissolves concremented Blood, promotes Conception, and cures the Epilepsy. The *Astragalus* is recommended against the Gravel, Colic, Epilepsy, and for promoting Delivery. The Fat, especially if old, apply'd externally, is said to draw Thorns and Splinters out of the Flesh; to break Abscesses, and to cure Pains of the Teeth. The Dung is recommended for the Stone and Dyfentery, and is esteem'd a good Application to Burns; and the Hairs stop Hæmorrhages.

Lepus marinus, Offic. The Sea Hare. It is taken in the Sea, and according to the Description of *Dioscorides*, resembles a small *Loligo*, or Cuttle Fish. Bruised either by itself, or with the *Urtica marina*, (a sort of Shell Fish) and the Part appointed therewith, it extirpates the Hair.

Leuciscus, Offic. The Dace, or Dare. It is found in Rivers. The Flesh is used in the Kitchen, and the Fat and Gall in Medicine. The Fat is good for Pains of the Ears, and mix'd with the Gall, it is good for a Dimness of Sight.

Limax ater, Offic. The Black Snail. Bruised and applied to Ulcers, they have a lenient Effect in an extraordinary Measure, according to *Enzelius*.

Limax ruber, Offic. The red Snail. It is found in Fields. The Liquor of Snails, which is what is used in Medicine, is prepared by cutting

ting the Snails in small Pieces, then mixing them with an equal Quantity of Salt, and afterwards putting them into *Hippocrate's* Sleeve, and leaving them in a Cellar, or cool Place, where they dissolve, and pass off in a Liquor. This Liquor is used to anoint the Parts affected with the Gout, and to extirpate Warts, being first scraped with a Penknife; it also cures a *Prolapsus*, or falling down of the *Anus*.

Limax terrestris. See *Cochlea*.

Linaria, Offic. The common Linnet. The Flesh of this Bird is recommended by some as an Analeptic, or Restorative; it also expels Stones from the Kidneys and Bladder.

Locusta, Offic. The Grasshopper. It is a winged Insect, of a green Colour, living in open Fields. Locusts in a Suffumigation, relieve under a Dysfury, especially such as is incident to the Female Sex. The *Locusta*, called *Asiracus*, or *Onos*, has no Wings, but large Members, while recent. This dried, and taken in Wine, is a very good Antidote against the Poison of the Scorpion.

Lucius, Offic. The Pike, or Pickerel. It is common in Rivers, and the Parts used are the Mandible, or lower Jaw, and the Fat: This latter is a common Remedy, and used to anoint the Soles of the Feet, and the Breasts of Infants, in order to make a Revulsion of a Catarrh, or to mitigate a Cough. The Mandible is drying and abstergent, for which Reason, it is prescribed as a Specific in a Pleurisy: It is of Service also, as well as the other Bones of the Head, in the Stone, the *Fluor Albus*, and difficult Child Birth. The Ashes, used outwardly, stop a Discharge of *Ichor*, cleanse old Wounds, and dry the *Hæmorrhoids*. A Water distill'd from the Gall, is esteem'd in Disorders of the Eyes. The Gall of a Pike is much recommended for cold Dis-

orders, attended with an Inactivity of the Bile. It is also reckon'd good for Agues, if taken upon the Approach of the Fit; the Dose is seven or eight Drops in a proper Vehicle. It is likewise said, that the Heart produces the same Effect. Small Stones are found in a Pike's Head, which are looked upon as serviceable for purifying the Blood, forwarding the *Menses*, and provoking Urine; for expelling the Stone from the Kidneys and Bladder; and for the Falling Sicknes. The Dose is from twenty five Grains to a Dram.

Lumbricus terrestris, *Vermis terrestris*, Offic. The Earth Worm. It is an Hermaphroditic, long Animal, without Legs, of the Thickness of a Goose-Quill, soft, carnos, and annulated, of a faint blood Colour, with a red Neck, living underground, of an earthy Taste, and no Smell. Earth-Worms are remarkably diuretic, diaphoretic, and anodyne; they discuss, mollify, open Obstructions, increase Milk, and conglutinate Wounds, and divided Nerves. They are principally used in Apoplexies, Convulsions, and other Affections of the Nerves and Muscles, in the Jaundice, Dropsy, and Colic, and have a specific Virtue against the scorbutic Gout: They mitigate Pains of the Gout, and their Ashes are said to cure the Tooth-ach. Earth-Worms are often used in Compositions for cooling and cleansing the *Viscera*. They are accounted much of the same Nature as Snails; but they seem to have more of an earthy or nitrous Salt, which makes them afford Parts more penetrating and deterfive. They are good in Inflammations and Tubercles of the Lungs; and are particularly useful in Affections of the Kidneys, and urinary Passages, which they cool and cleanse very much. The compound Water, which has its Name from them in the Shops, is esteem'd a

very good Medicine in the above-mentioned Cases.

Lupus, Offic. The Wolf. The Parts of this Animal used in Medicine are the Teeth, Heart, Liver, Intestines, Fat, Bones, Dung and Skin. The Teeth, set in Silver, are given to Infants, to rub their Gums, in order to make Way for the Eruption of their Teeth. The Heart is said to be good for the Epilepsy. The Liver corrects hepatic Disorders, and is, therefore, good for those who are hydropical, or emaciated, and for such as are molested with Coughs. The Intestines are exhibited as an extraordinary Remedy in the Pain of the Colic; which they are, also, said to cure, if only tied about the Patient: The same Effect is ascribed to the Skin. The Fat is of equal Virtue with that of the Dog; it heats, digests, cures Diseases of the Joints, and is good for sore Eyes. The Bones are effectual in the Pleurisy, and for Blows and Punctures. And the Dung is good for the Colic.

Lupus marinus, Schonf. Ichth. The Sea Wolf. It is found in the Sea, the *Dentes Molares* of this Fish, called the Toad-Stone in the Shops (*Lapis Bufonites*) are used, which are said to be excellent in the Plague, and against Poisons.

Luscinia, Offic. The Nightingale. The Flesh and the Gall are used, the former of which is effectual in a Cachexy, and comforts the Brain; and the Gall, made into a *Litus* with Honey, mightily sharpens the Sight.

Lutra, Offic. The Otter. It is found in large Rivers, and the Fat is used; which, being mixed, and boiled up with digestive Medicines, is very serviceable in removing Diseases of the Joints. The Liver, dried, powdered, and taken in the Quantity of a Scruple, or a Dram, is recommended for a Dysentery. The Testicles likewise, dried, pow-

der'd, and taken in the like Dose, are said to cure an Epilepsy.

Lynx, Offic. The Ounce. The Parts used, are the Fat, and the Claws; the Fat is proper for Resolutions, Strains and Luxations of the Joints; the Claw is set in Gold and Silver, and worn as an Amulet against the Epilepsy and Convulsions.

Mæna, Offic. The Cackrel. It is taken in the *Mediterranean* Sea. The Head, burnt to Ashes, and sprinkled on the Parts, cures callous Fissures of the *Anus*. The *Garum*, or Pickle prepared of the Fish is good to wash putrid Ulcers in the Mouth.

Manati, Offic. The Sea Cow. The Part of this Animal which is used in Medicine is the *Os Petrosum* of the Head, which is crustaceous, white, and like Ivory, of various Forms. It is much recommended for wearing away the Stone in the Kidneys and Bladder, and for easing Nephritic and Colic Pains. *Geoffroy* says, that it has the Reputation of preventing an Hemorrhage, if worn about the Neck. *F. Hoffman* recommends it in the Epilepsy.

Mater Perlarum, Offic. Mother of Pearl. This is found in the *Mediterranean* Sea, and other Places. The Shell, besides the Virtues it possesses in common with the other *Testacea*, are said to have a cordial Quality, but I dont find this Assertion has any real Foundation from Experience. The Pearls found in these Shells are of two Sorts, *Oriental* and *Occidental*, the former of which are most esteem'd. They are a kind of *Bezoar*, bred in this, and sometimes in Oysters and Muscles; and accordingly they consist of several *Stratas* and are really stony Concretions. The best *Oriental* Pearls are found in the Island of *Ormuz*, in the *Persian* Gulf: They are likewise gathered in the Gulf of *Mexico*, in the Province of *Costa Rica*, and in several

ral other Places of *America*; but these *Occidental* Pearls are less esteemed than the former. Small Pearls, commonly called Seed Pearls, are likewise, found on the Coasts of *Scotland*. Sometimes they are found from two to seven in one Oyster; which shews how unjustly they are termed by some *Uniones*, as if there was only one in each Shell. *Valentini*, on the Credit of one *Kregger*, pretends, they are the Eggs of these Animals; but this needs Confirmation. When thrown into the Fire, they give an urinous Smell, in a small Degree: They may sometimes be whitened by taking off the outer *Stratum*, when yellowish; but this diminishes their Size. Pearls are a very good Absorbent, being levigated on the Pophyry, like Crabs-Eyes; but they have, likewise, other Qualities, since they yield a volatile Salt by the Retort, being, on that account, Cordial and Depuratory.

Melanurus, Offic. The black Tail. It is a Fish taken in the *Mediterranean* Sea. Being eaten boil'd, it sharpens the Sight, and the Broth thereof cures the Colic, as we are assur'd by *Kyranides*.

Meleagris, Offic. The Turkey. The Flesh is esteemed analeptic, or restorative, and stimulative to Venerary. The Food of Turkeys is principally of Vegetable Substances, and the habitual Exercise not very great, hence their Salts are not very much exalted. They are esteemed to be of easy Digestion, especially when young.

Mergus, Offic. The Goosander, or Dundiver. This is a Fowl well known upon the Sea Coasts. The Liver of it, when stale, taken with *Hydromel*, in the Quantity of two *Ligulæ*, is said by *Dioscorides* to expel the Secundines. *Aetius* recommends the Liver roasted, and taken with Oil, and a little Salt, as an excellent

Remedy against the Consequences of the Bite of a mad Dog. The entire Bird, roasted, is esteem'd good for a Leprosy, and Disorders of the Spleen. The Blood is an Alexipharmic, and good against venomous Bites; and the Eggs are said to be a Remedy for a Dyfentery, and Disorders of the Kidneys and Stomach.

Merops, Offic. The Bee-eater. It is frequently found in *Crete*, and *Italy*. The entire Bird, and its Heart, are recommended in cardiac, icteric, and stomachic Disorders. The Gall, mixed with Honey, and the Juice of Rue, is said to cure Suffusions of the Eyes.

Merula, Offic. The Black-Bird. *Pliny* informs us, that this Bird roasted with Myrtle Berries inclosed in it, cures the Dyfentery. The Dung, mix'd with Vinegar, takes off Freckles.

Merula is also the Name of a Fish, called the Cook-fish, which is found in the Ocean. *Trallian* recommends it in an hepatic Dyfentery from cold Intemperature, and Epilepsy. *Pliny* relates, that it is good in Disorders of the Liver, and Fevers.

Millepedes, *Aselli*, and *Onisci*, Offic. Wood-Lice, Sows, or Church-Bugs. They are small Insects, scarce a Finger's Breadth in Length, and near half a Digit in Breadth, and of a livid blackish Colour. They are found under Vessels that hold Water, and at a Touch with the Hand, roll themselves up in a spherical Figure. They are of fine Parts; digest, attenuate, absterge, and open. Hence they are of singular Efficacy in resolving a tartareous Mucilage, and reducing the Stone to a Mucilage, in opening Obstructions of the *Viscera*, and, consequently, for the Jaundice, nephritic Pains, Dyfury, Colic, *Asthma*, and the like. Outwardly, the Powder of them is good for the Eyes, and Pains of the Ears; and, made into a *Litus*, for the Quin-

fey; apply'd alive, they cure a *Phagedæna*. *Sennertus* commends them against the Stone in the Bladder; and *Riverius* gives Instances of Wonders perform'd by them in inveterate *Strumas* and Ulcers.

Milvus, Offic. The Kite or Glead. The whole Bird burnt, the Head, Liver, Gall, Dung, and Fat are used in Medicine. The Ashes of the Bird burnt, are said to be effectual in the Gout and Epilepsy, being taken inwardly; the same is said of the Head and Liver, being burnt; and the latter is, also, an Ingredient in ophthalmic Medicines. The Blood, mix'd with Nettles, and apply'd, is said to give Relief under the Gout; the Gall enters the Composition of *Collyria*, for the Eyes; and the Fat is used to anoint the Parts pained with the Gout.

Milvus is also the Name of a Fish, called the Kite-Fish. It is taken in great Plenty in the *Ocean* and *Mediterranean*, and the Gall thereof is used to absterge an *Albugo*, or whatever else may cause a Dimness of Sight.

Monedula, Offic. The Jackdaw. The Flesh of this Bird externally apply'd, dissolves Tumors, and proves beneficial in scrophulous Swellings.

Monoceros, *Unicornu*, Offic. The Unicorn. It is a Fish taken in *Davis's* Straights; and the Part in Use is the very large, white, round, striated turned Tooth, growing out on the left Side of the upper Jaw, almost in the same Manner as that of an Elephant; but that on the right Side soon falls off. It is distinguished from Ivory by the Fineness of its Fibres: It is also, generally more solid and ponderous; in other Respects it resembles Ivory. As to the Virtues, it is sudorific, alexipharmic, and cordial, whence it is commended against Poisons, contagious Diseases, and the like; it is, also, thought effectual in the Epilepsy of Infants. *Andreas Baccius* has written a whole

Book of this Animal, in which he directs Fragments of it to be set in Rings, and worn upon the Fingers, or hung about the Neck instead of an Amulet, so as to touch the Skin. It has the same Virtues as Hartshorn, Ivory, and the like Substances. The Fragments of Horns, which are sold under the Name of *Unicorn's Horn*, are no other, as we are assured by *Paulus Ammanus*, than Bones of the Whale, Sea-Horse, or Teeth of the Elephant, which, as *Cardan* says, may be made, by artificial Means, to resemble this Horn.

Moschus. Musk. This is produc'd from the *Animal Moschiferum*, Offic. *Capra Moschus*. *Aldrov. de Quad.* Biful. This Animal seems neither to be of the Goat, nor of the Hart kind. The only Part of it in Use is, Musk, which is a grumous, pinguius, and unctuous Substance, not unlike grumous Blood, of a blackish rusty Colour, of a somewhat acrid and bitter Taste, of a fragrant grateful Smell, and found in Follicules, situated near the Navel of the Animal: It is of an heating, drying, attenuating, discutient, cordial, alexipharmic, and, consequently, cephalic Quality: It is principally used in Palpitations, and all other Disorders of the Heart, because it cherishes, rouses, and refreshes the vital Spirits. For the same Reason it is, also, used in Disorders of the Head and Nerves, produced either by Cold or gross Humours, as, also, in Colics. Externally it deterges Specks of the Eyes, dries up moist Defluxions, proves a *Stimulus* to Venerly, and restores the diminished Hearing. Musk has of late Years been found by Experience, an excellent Remedy in nervous Disorders, particularly Convulsions, and in Fevers it has been given with great Success, where Sleep has been wanting, and also in manical Cases, as I have been informed; but in such Cases, it is given in very large Quantities,

ties, for Example, thirty Grains, and repeated as Occasion requires. It is an Ingredient in the celebrated *Tonquin* Remedy, for the Bite of a mad Dog.

The Generation of Musk has laid a Foundation for no small Disputes among Authors; some affirming one, and some another Thing; for some maintain it to be a purulent and excrementitious Humour, concocted and collected in the Follicule, near the Navel of the Animal: But, according to them, the Animal itself, which is of a falacious and lascivious Disposition, by rubbing its Belly against Stones and Trees, tears this Follicule, and, by that Means, discharges the Humour contained in it, which, being coagulated by the Air and Sun, is concentered into that Substance we call Musk. Others maintain, that the Musk is not evacuated by any Dilaceration of the Follicule, but flows spontaneously through an excretory Duct, allotted for that Purpose. Others affirm, that Musk is only the Follicule of the Animal, cut out after it is killed: And this Opinion is confirmed by our Merchants, who, for the most Part, buy the Musk contained in its natural Follicule. Others are of Opinion, that Musk is Blood extravasated, and collected into Apostems, by beating the Animal till Tumors and Abscesses are raised, which being, as it were, by a Ligature constricted into Follicules, are afterwards cut out, and afford the Musk. Others are of Opinion, that all the Parts of the Animal afford Musk. In my Opinion, (says *Dale*,) Musk seems to be an excrementitious Blood, which has undergone various Concoctions and Alterations in its proper Follicule, and is either naturally secreted, and collected by human Industry, or contained in the Follicule of the Animal, when killed at a proper Season: But the crafty and fraudulent

Merchants add the Blood, Skins, and other Parts of the Animal to the Musk; and with this Mixture they stuff Bags, made of the Skin, and sell them for true and genuine Musk Follicules: But this Piece of Fraud is easily discover'd by the Skilful, and the cautious; for that Musk, which, when burned, evaporates, is thought to be genuine; but if, when burned, there remains something like a Coal, it is adulterated.

Motacilla, Offic. The Water Wag-tail. This Bird is celebrated for its Virtue in wasting the Stone.

Mugil, Offic. The Mullet. It is taken in the Sea; the Flesh is used in the Kitchen, and the Part serviceable in Medicine, is the *Botargum*, or salted Spawn, which is prepar'd in the following Manner: They take out the Follicles of the Spawn entrie, and cover them with rough bruised Salt for four or five Hours; after this they put them in a Press, between two wooden Planks or Boards, for a Day and a Night: Then they wash them, and afterwards dry them in the Sun for thirteen or fourteen Days together, taking them into the House at Night. Others say they hang them up in the Smoke, but far enough from the Flame, that they may not be injur'd by the Vehemence of the Heat. This excites a decay'd Appetite, and provoke Thirst, and give a Relish to Wine.

Mullus, Offic. The lesser Mullet. This Fish, frequently eaten, is thought to procure a Dimness of Sight; being cut open, and apply'd raw, it cures the Bites of the Sea-Dragon, the Scorpion, and the Spider.

Mulus, Offic. The Mule. This is an Animal got by an Ass upon a Mare. The Hoof, Urine, and Dung, are used in Medicine. The Hoof, used as a Suffumigation, is said to check too profuse menstrual Discharges; burnt and taken internally,

nally, it is reported to cause Barrenness, and in an Ointment, to cure an *Alopecia*. The Urine, together with its Sediment, is recommended as a Cure for Corns. The Dung stops Hæmorrhages of the Womb, and is good for a Dysentery, and Pains of the Spleen.

Mumia, Mummy. This is already specify'd under the Article *Homo*.

Mus, Offic. The Mouse. The whole Animal, and its Dung, are used in Medicine. The Mouse, cut up alive, and apply'd, draws out Splinters, Darts, and Arrows, and cures the Bites of Scorpions, extracting the Poison; the Ashes cure the involuntary, or nocturnal Flux of Urine; the Dung purges Infants by Stool; is used in Clysters, cures an *Alopecia*, absterges Scurf from the Head, diminishes Stones in the Kidneys, or Bladder, and removes a *Condyloma*, *Verruca*, *Ficus*, *Marisca*, and the like Tumors affecting the *Anus*.

Mus alpinus, Offic. The Mountain Mouse. It lives in the highest Parts of the *Alps*, and the Fat is used, being recommended in nervous Affections, and for Stiffness and Contractions of the Joints.

Mus Araneus, Offic. The Erd Shrew, Hardy Shrew, or Shrew Mouse. It is an Inhabitant of the Fields, and has been found by Experience, as is said, to be peculiarly serviceable in Affections of the *Anus*, being burnt, and apply'd with the Fat of a Goose.

Mus major, Offic. The Rat. The Part used is the Dung; nine Pieces of Rat's Dung swallowed, are accounted, by some of our good Women, a singular Remedy for a Suppression of the *Menses*.

Musca, Offic. The Fly. There are various Species of Flies, but the common Sort are most generally

used, and these prevent a Falling off of the Hairs.

Mustela, Offic. The Weasel. This Animal itself it used, when disemboweled, preserved in Salt, and dried in the Shade. Its Stomach, is, also used. Two Drams of the Animal, prepared in the Manner above-mentioned, and drank in Wine, are said to be an instantaneous Remedy against the Venom of all Kinds of Serpents; and against Poisons, take internally. The Stomach, when filled with Coriander Seeds, and preserved for a due Time, if drank in some proper Liquor, is beneficial in Epilepsies, and Wounds inflicted by Serpents. This Animal, when burnt in an earthen Vessel, is serviceable in arthritic Pains. Strumous Swellings are lessened by being anointed with the Blood of this Animal, or its Ashes mixed with Vinegar. These are, also, beneficial in Epilepsies.

Mustela is also the Name of a Fish, called the Eel-Pout. This Fish is found in Rivers, and its Liver, Stomach, and Spine are used. The Liver, when suspended in a glass Vessel, and exposed to a due Degree of Heat, is coagulated into a yellow Liquor greatly beneficial in Specks of the Eyes, and Dimness of Sight. The Stomach is highly recommended against Disorders of the *Uterus*; but, when drank in some proper Liquor, is principally beneficial in expelling the Secundines, and removing Colics. The Spine, when reduced to a Powder, is said to cure the Epilepsy.

Mustelus-Spinax, A Name for the Galew, or Hound Fish.

Mytilus, Offic. The Muscle. It is taken in our Seas. The Shell is useful in Medicine, and is an alkaline Substance, of the same Virtues with other Shells.

Noctua, Offic. The Barn or white Owl. The Flesh, Fat, and Gall, are

are used. The Flesh cures the Palsy, and melancholy Persons, and the like. The Ashes of the Bird, burnt entire with the Feathers, being introduced into the Throat, have an admirable Effect in opening and breaking the Imposthume in a Quinsy. The Gall absterges Specks in the Eye, and the Fat sharpens the Sight.

Oculi Cancrorum, Crabs Eyes. See *Astacus fluviatilis*.

Oniscus. The Whiting. See *Astacus minor*.

Ostreum, Offic. The Oyster. Oyster-shells Powder, without Calcination, are absorbent and drying, and are said to provoke Sweat and absterge. Hence they are often used in those Sorts of Fevers which terminate by a *Diaphoresis*. Externally they are used in Dentifrices, and are applied to Excrescences about the *Anus*. But when Oyster-shells are calcin'd, they become Lime, and act in a quite different Manner; and then prudently manag'd, they are excellent in Flatulencies, the Stone, Gravel, and Infarctions of the urinary Passages. Oysters apply'd to pestilential Buboës are said to extract all the Venom. They are esteem'd nourishing, good in a *Phthisis*, and both the Shell and the Flesh, are said to excite venereal Inclinations and Abilities.

Ovis, Offic. The Sheep. The Parts used in Medicine are the Brain, Gall, the *Oesypus*, the raw or unwashed Wool (*Lana succida*) the Fat, Lungs, Cawl, Dung, Urine, Bladder, Head, Feet, incinerated Bone, and Rennet. The Brain of a Ram is said to be effectual in preventing immoderate Sleep in epidemic Diseases, and to facilitate Dentition. The Gall loosens the Belly; applied outwardly, cures a *Carcinoma*, and is of Service in a Purulency of the Ears: The Gall of a Lamb is prescribed for the Epilepsy. The *Oesypus* is emollient, resolvent, heating, anodyne,

and proper in Luxations, Contusions, and the like. The Wool of a Lamb is good to mitigate and mollify Tumors in the Neck. The raw Wool of a Sheep is heating, emollient, lenient, and has the same Virtues as the *Oesypus*. The Fat, given, in red Wine, stops Hæmorrhages, and cures a *Diarrhæa*, Dysentery, and Gripes. The Lungs, applied to the Head, mitigate the Pains, and immoderate Heat thereof, and compose the disordered and tumultuous Spirits; whence it is of principal Service in Phrensies, Want of Sleep, and the like Disorders. The Cawl applied hot, cures the Pain of the Colic. The Dung is refrigerating, drying, aperitive, and discutient: Whence it is of very great Efficacy in the Jaundice, and other Distempers; and, used externally, cures a Tumor of the Spleen, a *Thymus*, Corns, Warts, and other cutaneous Tumors; and is, also, very comfortable in Ambustions. The Urine, drank, expels the Water in an *Anasarca*. The Bladder, burnt, and exhibited, relieves those who cannot retain their Urine. The Head and Feet of a Wether, well boiled in running Water, are serviceable in *Atrophies* and Contracti-
ons. The Bones of a Lamb, incinerated, promote the Consolidation of Wounds, even of those which are most difficult to be consolidated. The Rennet is good against Poisons; to curdle Milk, and for venomous Bites.

Palumbus, Offic. The Ring Dove. It is an Inhabitant of the Woods; the Virtues are much the same with those of the common Pidgeon, or Dove; the burnt Feathers are said to cure the Jaundice, and to be good for the Stone and Dysfury.

Parus, Offic. The Leopard. The Fat which is the Part used, is reckon'd one of the best Cosmetics.

Parus, Offic. The Titmouse. This Bird is celebrated for its Virtues against

gainst the Stone in the Kidneys, and Colic Pains, if eaten as Food, or burnt, and taken as a Medicine.

Passer troglodytes, Offic. The Wren. This Bird is very much commended for its Virtue in the Attrition and Expulsion of the Stone, whether it be taken whole, and eaten raw season'd with Salt, or burnt to Ashes, and so exhibited.

Passer vulgaris, Offic. The House Sparrow. As this Bird is very salacious, it is recommended, especially the Brain of it, as a Strengtheners and Incentive to Venery.

Passinaca marina, Offic. The Poyson-Fish, Fire or Fierce-flaw. It is taken in the main Sea; the Parts of it used in Medicine are the Liver and the Prickle, which grows out of its Tail. The Liver is said to be good for the Itch; and, boiled in Oil, deterges the Lichen and Leprosy; the Prickle, as *Dioscorides* says, cures the Tooth-ach, by breaking and expelling the grieved Tooth.

Pavo, Offic. The Peacock. The whole Bird, the Fat, Gall, Dung, Feathers, and Eggs, are used in Medicine. The Broth of a Peacock, especially if it be fat, is said to be a Specific against the Pleurisy; the Fat, with the Juice of Rue, and Honey, is an excellent Medicine for the Colic. The Gall cures Dimness of Sight, represses Defluxions of the Eyes, and cures the Asperities of the Eyelids. The Dung, dried and pulveriz'd, and the Weight of a Dram macerated at Night in Wine, and exhibited for many Days together, have a peculiar Virtue of curing the Vertigo and Epilepsy. The Feathers are used in Suffumigations, for Hysterics; and the Eggs are prescribed for the Cure of what they call the Erratic Gout.

Pectunculus, Offic. The Cockle. The Fish is esteemed a delicious Food, either raw or boil'd. Of the Shells

calcin'd, and powder'd, excellent Dentifrices are prepar'd.

Pediculus, Offic. The Louse. Lice are taken by the Country People, as a Remedy against the Jaundice, and an Atrophy. *Schroder* takes Notice of a very whimsical Use of this Insect, which is, to put it into the Beginning of the Urethra, in order to excite Urine.

Pedro del Cobra. See *Serpens Indicus*.

Pedro del Porco. The Name of a Stone, found in the Gall Bladder of the Porcupine. See *Hystrix*.

Perca, Offic. The Pearch. This Fish is frequently found in Rivers; and the only Part of it used in Medicine are the Bones found in the Head near the Beginning of the *Spina Dorsi*, and in the Shops called *Lapides Percarum*; which in Virtues agree with the other testaceous Powders, and are used in dissolving the Stone, and cleansing the Kidneys. Externally they are, also, used in Dentifrices, and for drying Wounds.

Perdix, Offic. The common Partridge. The Parts of this Animal, used in Medicine, are the Flesh, Marrow, Blood, Liver, Gall, and the Feathers. The Flesh, if eaten, augments the Quantity of Semen and Milk, and proves a Stimulus to Venery. The Marrow, as, also, the Brain, when drank in some proper Liquor, are said to afford Relief to those who labour under a Jaundice. The Gall is, by some, highly extolled in Disorders of the Eyes. The Blood is used as an Ointment for the Eyes, when they are Blood-shot, and in recent Wounds of them. The Liver, dried before the Fire, and reduced to a Powder, stops an Epilepsy; and is accounted an highly efficacious Medicine against Fevers, if frequently exhibited in Yarrow-Water. The Feathers used by Way of Fumigation, and applied to the Nostrials,

Noftrils, are beneficial in a Suffocation of the *Uterus*, as, also, for alleviating, mitigating, and removing Colics, and other Pains of a like Nature.

Perdix rufa, Aldrov. Ornith. The red Legg'd Partridge. It agrees in Virtues with the preceding.

Phoca, Offic. The Soile, or Sea Calf. The Flesh and the Fat of this Animal are used in Medicine. The Flesh is commended by *Avicenna* in the Epilepsy, and Suffocations of the *Uterus*, and the Fat is greatly recommended by *Hippocrates*, in the Disorders of Women.

Pica, Offic. The Magpy, or Pianet. This Bird is very much commended against Dimness, Redness, and Pains of the Eyes, being eaten, or incinerated, and the Ashes put into the Eyes, or any other way apply'd. The Ashes are also exhibited in the *Mania*, Epilepsy and Melancholy.

Pila marina. This is a Species of *Alcyonium*, or a round spherical Ball, found on the Sea Coast, among Wrack. It is generally as large as a Person's Fist, but sometimes larger, and sometimes less. It is lanuginous, of a dark Colour, and formed by a Collection of Hairs, Sand, and other Impurities of the Sea, united by means of some glutinous Liquor. It is said to be proper for killing Worms, and preserving the Hairs, when applied externally. The *Pila marina* cannot be reduced to a Powder, till it is thoroughly calcin'd. Authors are of Opinion, that this Substance is good against scrophulous and strumous Disorders, not only on Account of its drying Nature, but, also in Consequence of some other latent Quality. Neither can I totally reject this Opinion, since it is a Substance, whose saline Quality is not destroy'd by Calcination.

Porcus, Offic. The tame Swine, or Hog. The Parts of this Animal used in Medicine, are the Lard, the Gall, the Dung, the Lungs, the A-

stragalus, and the Bladder. As the Lard is not of a very hot Quality, it is therefore made an Ingredient in refrigerating Ointments, and used for alleviating inveterate Pains of the Loins and Joints. *Dioscorides* informs us, that the Gall of this Animal is used with great Success against Ulcers of the Ears, and of all other Parts. It is also, said to prevent the Growth of the Hairs. The Excrements are of an emollient and discutient Quality, and for that Reason beneficial in Itchings, excanthe-matous Eruptions, Corns of the Feet, and other hard Tubercles; the Excrements, also, cure the Bites of venomous Animals, and stop Hæmorrhages of the Nose; the Lungs are highly beneficial, if apply'd to Abrasions of the Skin, contracted by the Shoes. The *Astragalus* is recommended for Fractures of the Bones; as also for Pains of the Neck and Head. The Bladder is beneficial to those who discharge their Urine involuntarily. It produces the same Effects, when applied to the *Pubes*, and is said to provoke Urine. There is said to be found a triangular Bone, within the *Cranium* of a Swine, at the *Basís* of the *Dura Mater*, which when properly applied is said to be almost a Specific in an Epilepsy, and to be much in Use among the Vulgar in *Germany* for that Distemper.

Aper, Offic. The wild Swine, or Boar. The Lard, the Teeth, the *Penis*, the Gall, the Excrements, and the Urine are used in Medicine. The Lard is possess'd of the same Qualities, tho' in a stronger Degree, with that of the tame Swine. The Teeth are exhibited as a Specific in the Pleurisy, and are said to cure the Quinsy. The *Penis* and Testicles are said to remove Impotence and Barrenness. The Gall discusses strumous Swellings. The Excrements when dried, are thought beneficial in stopping Vomitings of Blood, and

Hæmorrhages, when applied externally. The Urine is a Specific for resolving and expelling the Stone of the Bladder.

Proscarabæus, Offic. The Oil Beetle. It is found creeping by Path-sides, and in Woods, in the Months of *May* and *June*, and the Insect itself, and its yellowish Liquor are used in Medicine. It is much of the Nature of *Cantharides*, forces Urine and Blood, and is of extraordinary Efficacy against the Bite of a mad Dog. Taken in Powder, or preserved, it cures the wandering Gout. Its Liquor is by some esteemed of Efficacy in Wounds, it is an Ingredient also, in Plaisters for pestilential Buboës and Carbuncles, and in Antidotes; an Oil is prepared by Infusion of the living Animals in common Oil, which some use instead of Oil of Scorpions.

Propolis, or Bee Glue. This is already specify'd under the Article *Apes*.

Pulmo marinus, Offic. Sea Lungs. This Substance floats in the Sea; is of a pellucid bluish Colour, resembling in some measure, that of Crystal, and so tender, that it can hardly be taken out of the Sea entire. When recently triturated, and used by way of Ointment, it cures Gouts and Chilblains.

Purpura, Offic. The Purple Fish. This Fish is frequently found in the *Mediterranean Sea*. In the Shops no Part of it is used, except the Shell, which is strong, furrow'd, striated, and rough, with short Tubercles. In former Ages the *Sanies* of this Fish was used for dying: The Shell is of an alkaline Quality, and in Virtues agrees with other testaceous Medicines.

Raia, Offic. The Thornback. The Flesh, Liver, and Gall of this Fish, are used in Medicine. The Flesh is analeptic, and is said to in-

crease Venereal Vigour. The Gall is recommended against Dimness of Sight, and Exulcerations of the Eyes, and is a Remedy for the Itch.

Rana, Offic. The common Frog. The Animal itself, and its Spawn, are used in Medicine. The Frog itself is greatly recommended, as an Antidote for the Bites of all Kinds of Serpents, and for a Stiffness of the Tendons; apply'd to a pestilential Carbuncle, till it dies, it is said to extract the Poison. The Spawn refrigerates, constipates, incrustates, mitigates Pains, cures the Itch in the Hands, a Whitloe, and *Herpes*; is good in an Erysipelas, Burns, and Inflammations, and is a good Application for a red Face.

Rana viridis, Offic. The Tree Frog. The whole Frog, and its Blood, are used in Medicine. The Animal agrees in Virtues with the common Frog, and its Ashes sprinkled on Wounds, are said most effectually to restrain their Bleeding. The Blood is recommended as of peculiar Efficacy in a Philtre.

Rangifer, Offic. The Rain Deer. It is an Inhabitant of *Lapland*, and its Horns and Hoofs are of use in spasmodic Affections.

Remora, Offic. The sucking Fish. It is taken in the main Sea. As to its Virtues, it restrains Venery, prevents Abortion, and retains the *Fœtus* till Maturity.

Rhinoceros, Offic. The Rhinoceros. The Part in Use is the black Fissile, pyramidal Horn, a Cubit in Length, of the Figure of a Buffalo's Horn, and perfectly solid, or without Cavity. This Horn is commended against contagious Poisons, and other Distempers which require Sudorifics, and therefore in such Cases, may supply the Want of the Unicorn's Horn. *Monti* writes that the Horn is alexipharmic, cardiac, stomachic, diaphoretic, and a Sweetener. Though there are various Kinds of

of Quadrupeds with one Horn describ'd by Authors, I take them all, says *Dale*, to be fictitious, except the *Rhinoceros*, which is the only Unicorn, or one Horn'd Quadruped, and perhaps the very same with that of the Antients, whose Horn *Ælian* affirms to be black. And *Schroder*, as well as others, ascribe the Virtues said to be in the Horn of the Unicorn, to the Horn of the *Rhinoceros*.

Ricinus, Offic. The Tick. It is a nasty little Animal, of a livid Colour, with a blunt and roundish Tail, and full of Blood, and very much infects Cows, Swine, Goats, Sheep, and Dogs. The Blood of those Ticks which live about Dogs, as *Pliny* says, is a *Psilothrum*, or Medicine to take off Hair, and mitigate an *Erysipelas*; and we are told by *Amatus*, that it is an admirable Remedy for an obstinate and malignant *Impetigo*.

Rubecula, Offic. The Robin red Breast, or Ruddock. This Bird when eaten, is by some esteemed to excite Venereal Inclinations.

Rubicilla, Offic. The Bull-finch, Alp, or Nope. The Flesh of this Bird is recommended against the Colic.

Rutilus, Offic. The Roche. The Flesh of this Fish is said to promote Venereal Inclinations.

Salamandra, Offic. The Salamander, or Quench Fire. The Ashes of this Animal, are an excellent and effectual Cure for scrophulous Ulcers, being sprinkled on the Parts affected.

Sanguisuga, Leeches. These are already taken Notice of under the Article *Hirudo*.

Scarabæus cornutus, Offic. The Stag Fly. This Insect is, as I take it, what is usually called the Cock Chaffer. It is recommended as an Amulet for an Ague, or Pains and Contractions of the Tendon, if ap-

plied to the Part affected. *Schroder* reports, that if tied about the Necks of Children, it enables them to retain their Urine. An Oil is prepared by Infusion of these Insects, is recommended by the same Author in Pains of the Ears, if drop'd into them.

Scarabæus pilularis, Schrod. The Powder of this Insect sprinkled upon a protuberating Eye, or prolapsed *Anus*, is said to afford singular Relief.

Scincus, Offic. The Scink. It is an aquatic Animal, cover'd with Ash colour'd Scales, and mark'd with a Sky colour'd List, which reaches from the Head to the Tail. It is an Alexipharmic, and Provocative to Venery.

Scolopendra, Offic. The many Feet. It is a flat, slender Worm, three Digits in length, of a yellowish or reddish Colour, furnish'd on both Sides with a Multitude of Feet, two pretty long *Antennæ*, and a bifid Tail. Being boil'd in Wine, it is esteemed by some a Depilatory, or Medicine to take off Hair.

Scolopendra marina, Offic. The Sea many Feet. It is found in the Bottom of the Sea, according to *Gesner*, or in Oyster Beds, as *Mousser* says. Boiled in Oil, and the Parts anointed therewith, it takes off the Hair; but the Touch thereof excites Itching.

Scolopax. A Name for the *Galinago*, or Woodcock.

Scomber, Offic. The Mackrel, or Macarel. It is commended for the Jaundice, and Obstructions of the Liver.

Scorpio, Offic. The Scorpion. It is an Animal with eight Feet, resembling a Crab, only less, and of a blackish, or sooty Sort of Colour. Burnt alive, and the Ashes exhibited, they provoke Urine, when obstructed by the Stone in the Kidneys or Bladder; bruised and applied to the Place, they cure the Poison of their own Stings, others take it bruised

in Wine ; and others instill Oil of Scorpions into the Wound. The Oil of Scorpions, is by some recommended as effectual in a Suppression of Urine, the Bladder being anointed with it hot, or before a Fire.

Scorpius marinus, Offic. The Scorpion-Fish. It is taken in the *Mediterranean* Sea ; the Gall of it is good for Cataracts, an *Albugo*, or other Infirmities of the Eyes which darken the Sight.

Sepia, Offic. The Cuttle-Fish. This Fish is a Kind of *Polypus* ; it has a Bag in its Neck, containing a black Liquor, like Ink, which it emits to trouble the Water, when pursued by other Fishes. The Parts used in Medicine, are the Bone, or Shell, the black Liquor or Humor, and the Eggs. The first is a testaceous Substance, white and smooth, and tumid on each Side ; on the upper Part it is somewhat hard, smooth and glabrous ; on the lower, fungous, softish, somewhat rough, and friable. It grows on the Back of the Fish, and tastes a little acrimonious. This Substance dries and absterges ; cures Spots, Freckles and the tumid Itch ; is good for the Eyes, removes Swellings in the Gums, gives Relief in the Asthma, stops a Gonorrhæa, expels the Stone, and provokes Urine. The black Humor found in the Bladder within the Body, is said to loosen the Belly, and the Eggs absterge the Kidneys and Ureters, and provoke Urine and the *Menses*.

Seps, Offic. The Serpent Seps. This is a very poisonous Serpent, about three Foot long, and proportionably thick, said to be found in *Syria*, *Croatia*, and many other Countries. *Dioscorides* informs us, that taken in Wine, it cures its own Bite. The Poison of its Bite acts like that of the Viper, and is cured by the same Means.

Serpens, Offic. The Snake. The

Fat, Slough, or cast Skin, and the Gall are used in Medicine. The Fat mollifies stumous Swellings, cures Redness of the Eyes, clears them from Specks, and sharpens the Sight ; it mitigates the Pains of the Gout. The Slough, boiled in Wine, and the Decoction instilled into the Ears, eases their Pains ; and, used as a Colution, helps the Tooth-ach, cures an Impetigo, and makes the Hairs grow. The Gall applied to the Part affected, extracts the Poison caus'd by the Bites of Serpents.

Serpens Indicus, Offic. The Indian Serpent. This is a very venomous Serpent. The Part of this Serpent in Use, is the Stone, or rather the Bone, of the Head, called *Pedra del Cobra*. This Stone of the Serpent, called in *Ind. Med.* by Mistake, *Piedra di Cabra*, is of an Oval Figure, plain on one Side, and gibbous on the other, of a brown Colour, Shining with Pores interspersed. It expels all Sorts of Poisons, either taken inwardly, or outwardly applied. It resists Putrefaction, promotes insensible Perspiration, raises the vital Spirits, comforts the Heart, communicates a new Fermentation to the Blood, and relieves Nature under all malignant Distempers. Though this Stone be described by *Garcias*, *Redi*, and others, yet the Learned among the Moderns differ about it principally in two Respects, as, 1. Whether it be a Thing natural or factitious. *Kircher*, in his *China Illustrata*, and *Thevenot*, in his Relation of Voyages and Travels, affirm these Stones to be found in the Head of a great *Chinese* Serpent ; Mr. *Boyle*, in the Head of an *African* Serpent. Others on the contrary, as *Father Boccone*, in *Museo di Fisica*, suppose them to be artificial Substances, as calcined Bones, and other testaceous Fragments ; and *Thevenot* the Younger will have them to consist of a Mixture of the Ashes of some burnt

burnt Roots, and a Sort of Earth found near *Diu* in the *East Indies*. Another thing in which they differ, is about their Virtues. Father *Kircher* relates several Experiments of their Virtues in extracting the Poison infused by the Bite of a Viper, or another Serpent. Mr. *Boyle* in his Treatise of Specific Medicines, affirms the same from an Experiment made on a young Cat. And *Clayton*, in his Account of *Virginia* in the *Philosophical Transactions* writes, that he was present when the said Gentleman tried the Experiment on some Chickens, which all recover'd. Dr. *Havers* was an Eye-Witness, as he tells us, of the Salutary Effects of this Stone upon a Dog; and Dr. *Tyson*, in his Anatomy of the Rattle Snake, relates an Observation which he receiv'd from a celebrated Physician of *London*, who, by means hereof, cured a Man, who was bit by a Viper. *Bagliwi* also performed the same Thing for one who was stung by a Scorpion. But tho' these Experiments succeeded well with all the Persons before mentioned, yet others, as *Redi* and *Charas*, made the same Tryals, with different Success. Having given this brief Account of the Opinions of the Learned on both Sides, my best Way, (says *Dale*) I think is, to endeavour to reconcile them. For this End, I shall only observe, that I have seen two Sorts of this Kind of Stone, one of which was like a Bone, porous, and had visible Marks of the File; the other was of a more compact Substance, and polished. This I suppose, (says *Dale*) to be the factitious Stone, and a Counterfeit of the former; and therefore conjectures, that the unsuccessful Experiments were made with those artificial Stones, and not with the true. The *Lapis colubrinus*, which formerly went at a high Price, is now sold very cheap at *Manile*; but what

is thus sold, is not taken from the *Coluber* (Snake) but is made of Hartshorn luted up in an Earthen Pot, where it is burnt to a Blackness, and afterwards polished. The *Moors* call this adulterated; but say, it is made of a strange Kind of Clay, like *Terra Sigillata*. The true *Lapis Colubrinus* cures the Bites of Serpents by Application. In a Fever, attended with Purple Spots, several of these Stones applied, relieve the Patient. In the Year 1681, I saved, says *Camellus*, from present Death, a Boy of three Years old at *Brana*, who had swallow'd Arsenic dissolv'd in Milk, by the repeated Application of this Stone. It is a Question, whether the Virtue of this Stone is to be ascribed to the Salt in the Hartshorn not being thoroughly burnt, or to its Pores, by which it attracts like a Cupping Glass.

Serpens marinus, Offic. The Sea Serpent. It is found in the *Mediterranean Sea*. The Flesh is said to cure Incontinence of Urine, if taken with Lily Root.

Silurus, Offic. The Shoar-fish. This Fish is found in the *Danube*, and its Flesh is nourishing when eaten fresh, and loosens the Belly; but seasoned with Salt, affords very little Nourishment, but clears the *Aspera Arteria*, and mends the Voice. The salted Flesh applied draws out Splinters; and the Pickle cures a recent Dysentery, being used by Way of Pocus, by attracting the Flux of Humours to the Superficies; a Clyster of the same cures the *Sciatica*.

Simia, Offic. The Ape. The Parts in Use are the Stone, or *Bezoar Simia*, which is sometimes found in the Stomach of this Animal, the Heart, and the Flesh. The Heart roasted, or boiled in *Hydromel*, sharpens the Sight. The Flesh is cold and dry, austere, of very bad Juice, and unfit to eat.

Smaris, Offic. The white Cackrel. This is a Fish found in the *Mediterranean* Sea. The Head of this Fish salted and burnt, is said to repress the tumid Lips of Ulcers; to restrain phagedenic Ulcers; and consume Corns, and those Excrescences called *Thymi*. The salted Fish is said to be a good Application in Case of the Sting of a Scorpion, or the Bite of a mad Dog.

Sperma Ceti. This is agreed on all Hands to be the Product of the *Cetus*, Offic. or the Parma-fitty Whale. *Pomet* positively affirms that *Sperma Ceti* is the Brain of a Sort of Whale call'd *Byaris*, and, by the People of *St. John de Luz*; *Cachalot*; and he also affirms, that he has not only seen it prepar'd, but has often prepar'd it himself. This *Sperma Ceti* (says *Pomet*,) is usually prepar'd at *Bayonne*, and *St. John de Luz*; and this Work is so rare in *France*, that there are not above two Persons at the latter Place who know how to prepare it. Those who prepare it, take the Brain as aforesaid, and melt it over a gentle Fire; then they cast it into Moulds, like those wherein they refine Sugar; and after it is cold, and drain'd from the Oil, they take and melt it again, and proceed after the same Manner, till such time as it be well purified, and very white; then with a Knife, made for the Purpose, they cut it into Scales or Flakes, just so as it appears when brought to us. *Pomet* may possibly be right, as to the Process generally used for making *Sperma Ceti*; but I have seen *Sperma Ceti* which has undergone no treatment at all, except being put into Paper Bags, so that the Oil which adheres to it, may be absorb'd. The true *Sperma Ceti* is very white, and is in very small Flakes, not much larger than the Crystals of Tartar: It dissolves by rubbing upon the Hand into a Sort of Oil; and does not ad-

here to the Palate when chew'd, as the common Sort will; which makes me suspect, that it is mix'd with some other Substance, perhaps Wax, by those who make it for Sale. I can affirm with Certainty, that *Sperma Ceti* is neither the Oil, Brain, nor Sperm of the Whale, but a particular Substance found principally in the Head of the Fish; and flakes like boil'd Salmon, or Cod, when taken out. It is also found in other Parts of the Fish, but not in so large Quantities, or so good, as in the Head. It is a noble Medicine in many Cases, tho' principally used in Bruises, inward Hurts, and after Delivery. It is an excellent Balsamic in many Distempers of the Breast; and gently deterges and heals. In Coughs, from sharp Rheums, Erosions; and Ulcerations, it is very safe, pleasant, and effectual; as also in Pleurifies, and inward Imposthumations. Where the *Mucus* of the Bowels has been abraded by Acrimony and Cholera, as in *Diarrheas*, and Dysenteries, this is a very good Healer. In Ulcerations of the Kidneys, and bloody Urine, it is likewise a very suitable Medicine; and, by softening and relaxing the Fibres, it contributes frequently to the Expulsion of Gravel, by enlarging the Passages. It is most conveniently made up into the Form of Electuaries and Boles, with proper Conserves, and things of the like Kind: And in such Forms, if it be skillfully mixed, it gives them an agreeable Smoothness, and is not discoverable by the Patient. It is also very properly dissolv'd in a Draught, by the help of the Yolk of an Egg; or it is made into an Emulsion by the same Management. The usual Dose is about half a Dram. It is emollient and healing, outwardly used; but its greatest Use that Way is in the Small Pox, melted with Oil of Almonds: With this the Pustules are just kept moist,

moist, when they begin to harden ; and it wonderfully prevents those Scars they are apt to leave, by softening, and healing them up smooth. Altho' this is but, a modern Practice in this Distemper, yet *Schroder* takes Notice of its Use in his Time, in smoothing and filling up the Fissures, or Cavities, made by Blotches and Scabs. It is sometimes used as a Cosmétique, both in Paints, and in Pastes, to wash the Hands with.

Spodium. Burnt Ivory. See *Elephas*.

Squatina, Offic. King-stone, or Monk-fish. It is taken in the *British*, and other Seas. The Eggs, Skin, and Ashes, are used. The dry'd Eggs are found to be very serviceable in stopping a Looseness, by the Experience of the Fishermen, who use it for all Manner of Fluxes. Of the Skin is prepared an excellent *Smegma* for the *Psora* and *Scabies* ; and the Ashes are effectual against the *Alopecia* and *Achors*.

Squilla, Offic. The Shrimp. It is taken in the Sea, and agrees in Virtues with the *Astacus*, or Lobster.

Struthio, Offic. The Ostrich. The Parts of this Animal used in Medicine are, the Coat of the Craw, the Fat, and the Eggs. The inner Coat of the Craw corroborates the Stomach, and dissolves Stones in a surprising Manner. The Fat is agreeable to the nervous Parts, mollifies the Hardness of the Spleen, and mitigates nephritic Pains, the Parts being anointed therewith. The Eggs burnt and tritured in Vinegar cure the *Impetigo*.

Sturio, Offic. The Sturgeon. It is an Inhabitant of the Sea, but for the most Part it is found in Rivers. The Parts used are the Bones, and the *Caviar*, which is a Mass resembling green *Hamburg* Soap, both in Colour and Substance, and is exported in great Quantities from *Rus-*

sia to *Italy* and other Countries. The Way of preparing it is thus related by *Gesner*. They take the Spawn of the Sturgeon, and first cleansing them from the Nerves which are therein, wash them in Vinegar, or white Wine, and spread them upon a Table to dry. This done, they put them into a Vessel, and cover them with Salt, then break them abroad with the Hand, not using an Instrument, and afterwards put them into a Bag of a rare Texture, that the Humour may run through. When this is done they put it into a Pot with a Hole in the Bottom, by which the remaining Humour, if any, may be evacuated, and after well pressing and covering it close, set it aside for Use. The Bones are commended for the wandering Gout, and are exhibited in the Pain of the Colic. The *Caviar* is nourishing, increases the Semen, and provokes to Venery.

Sturnus, Offic. The Stare or Starling. It makes its Nest about Towers, and the Tops of Houses. Its Dung is esteemed a Cosmétique, and is said by *Galen* to cure the *Alphi*, *Panni*, *Impetigo*, and Morpew.

Sus, Offic. The Sow. See *Porcus*.

Talpa, Offic. The Mole. It lies in Burrows under the Earth ; and the Animal itself, the Heart, and the Blood, are used in Medicine. The Ashes of the burnt Mole, is good for the Leprosy, strumous Swellings and Fistulas. Taken inwardly in Beer or Wine, it cures the wandering Gout, and *Scrophula*. The Heart cures an *Hernia*, and the recent Blood cures an *Alopecia*, being rubb'd on the Part.

Taxus, Offic. The Badger. The whole Animal incinerated, its Blood, and its Fat, are used in Medicine. The Ashes of the burnt Animal are exhibited with Success in Pulmonic Disorders, and an *Hæmoptoe*. The Blood dry'd and pulveriz'd, is said to be good

for the Leprosy; and the same, distilled, to be effectual against the Pestilence. The Fat, as it is a little thicker, so it is somewhat hotter, and more efficacious, than the Fat of the Swine: It gives Relief under Pains of the Kidneys proceeding from the Stone, mitigates the Heat of Fevers, and restores Contractions and Weaknesses of the Joints and Nerves.

Tellina, Offic. The Limpin. Fresh Limpins are good for the Belly, especially the Liquor of them: Salted and burnt, then triturated, and instilled with Resin, they prevent the Hairs of the Eye-Lids, which have been pulled out, from ever growing again.

Teredo, Offic. The Wood-eater. There is great Dispute among Authors about the *Teredo*, some making it one thing, some another. *Aldrovandus* makes four Kinds of *Teredo*; one Kind is found in Wood, another is called *Vermiculus*, a third *Thris*, and a fourth *Cossus*; to these *Johnson*, from *Agricola*, adds a fifth, which, from its Copper Colour, is called *Kupfferworm*. But that Worm with six Legs, from which is produced the *Scarabæus minor arborum*, commonly found in Trees, is supposed to be the *Teredo* of the Shops. The Parts of this Insect in Use are the farinaceous Excrements, call'd *Powder of Post*. This Powder is drying, whence it is sprinkled, with good Success, on humid and watry Ulcers; and for the same Reason, is in much request among the good Women, for drying up the Excoriations of Infants.

Testudo marina, Offic. The Sea Tortoise, or Turtle. The Legs, *Penis*, and Gall of this Animal are used in Medicine. The Legs are superstitiously worn as a most approved Amulet against the Gout; the Gall is good for the Eyes, and the *Penis* is recommended by some in nephritic Disorders. The Flesh is esteem'd restorative, and good for the vedereal Disease.

Testudo palustris, Offic. The Water Tortoise. The Blood and Gall are used, which agree in Virtues with the other Tortoises.

Testudo terrestris, Offic. The Land Tortoise. The recent and crude Blood of this Animal is prescribed in an hectic Fever; and the same dry'd, is recommended for the Epilepsy.

Thunnus, Offic. The Tunney-fish, or Spanish Mackerel. The pickled Flesh of this Fish cures those who are bitten by the Viper called *Præster*; but the Patient is to vomit plentifully and frequently with large Draughts of Wine; it is of great Efficacy, also, against the Bite of a Dog, being rubbed on the Wound.

Thymallus. The Grayling, or Umber. See *Aschia*.

Tigris. Offic. The Tiger. The Fat of this Animal is used in Medicine, and agrees in Virtues with the Fat of a Dog.

Tinca, Offic. The Tench. It is a mucous Fish, which delights in marshy and muddy Waters. As to its Uses, it is cut into Pieces, and apply'd to the Wrists, and Soles of the Feet, in order to mitigate feverish Heats, and to divert the Venom of the Pestilence; in like Manner it is apply'd in Pains of the Head and Joints. Live Tenches, apply'd one after another to the Regions of the Navel and Liver, and kept there till they die, are said to cure the Jaundice; for they contract, it seems, a yellow Colour. *Schroder* says, that he has seen an incinerated Tench; and especially its Tegument, exhibited with Success in the *Fluor Albus*. The Broth of a Tench is superstitiously recommended in a Jaundice.

Torpedo, Offic. The Cramp-fish. It is taken in the *Mediterranean Sea*. It mitigates the Violence of the Pain in an inveterate Head-ach, being apply'd to the Part; and, also, prevents and restrains the falling down of the *Anus*, being in like Manner apply'd.

Trutta, Offic. The Trout. The Fat of this Fish is used in Medicine, and is of a lenifying and dissolving Nature; good for the Piles, and other Distempers of the *Anus*, Ulcers in the Breast, and Fissures in the Nipples.

Turdus, Offic. The Mavis, or Thrush. This Bird, when stuffed with Myrtle Berries, and roasted, is said to be exhibited with Success to those who labour under Fluxes. In the Time of the Plague, it is said to be highly beneficial when macerated in Vinegar. The Powder of this Bird is, by *Guainarius* recommended against the Effects of the *Napellus*, or Monks-hood.

Turdus, is also a Name for a Sort of Fish, called the *Wras*s, or Old-Wife. This Fish is found in the main Ocean, and in the *Mediterranean*, and is greatly recommended by *Trallian* in the Epilepsy and Pleurisy.

Turtur, Offic. The Turtle Dove. This Bird, and its Fat, are used. It agrees in Virtues with the Pigeon, especially in stopping Dysenteries, and immoderate Discharges of the *Menses*. The Fat collected when the Animal is roasting, is, according to *Schroder*, properly used as an Ointment in Disorders of the Kidneys, *Abdomen*, Breast, and Groins.

Vacca, Offic. The Cow. This is already specified under the Article *Bos*.

Vanellus, Offic. The Lapwing, or Bastard Plover. This Animal delights in Marshy Places, and its Ashes, Heart, and Skin, are used for Medicinal Purposes. The Ashes drank in Wine, are beneficial in Colics; and when applied by way of Cataplasm, cure the Bite of a mad Dog. The Heart alleviates Pains of the Loins, and the Skin is esteem'd good in *Cephalalgias*.

Vermis terrestris. The Worm. See *Lumbricus terrestris*.

Vespa, Offic. The Wasp. The whole Insect is used, and is supposed to open Obstructions of the Kidneys and Bladder, to break the Stone, and is thought by some to agree in Virtues with the *Millepedes*.

Vespertilio, Offic. The Bat, or Flitter Mouse. It appears in Summer Evenings, but in the Winter lies hid in Rocks and Caverns. The Flesh and Blood of this Animal are used; the first of which, being prepared, is good for a *Scirrhus*, and the Gout; and the Blood cures an *Alopecia*.

Vipera, Offic. The Viper. The Fat, rub'd well into the Part bit by a Viper, prevents the ill Consequences of such a Wound. The Flesh of the Viper is esteem'd alexipharmic, and sudorific, and is used internally in all pestilential and malignant Diseases, as the Plague, petechial Fevers, Leprosy, and the like. It is also used as a Restorative in Consumptions, and the Venereal Disease; and for this Purpose the Flesh is to be eaten dress'd; the Broth in which it is boil'd, is to be drank, and the Fat is to be rub'd into the Spine of the Back and Joints. These are the Virtues ascrib'd to the Flesh of the Viper, but I am afraid without any real Foundation from Experience; for I have given the Flesh, Broth, and Salt of Vipers, in very large Quantities, without any greater Effects, than I have observ'd upon the same Occasions from the Broths or Flesh, of Fowls, Veal, or Mutton, given in the same manner; and with Respect to the Salt of Vipers, it does not appear from Experience, that they are possess'd of any other Virtues, than Salt of Hartshorn, or any other Animal Salt. What is advertis'd and sold in London under the Name of *Essence of Vipers*, is only a Tincture of *Cantharides*, which as it stimulates to Venery, without imparting any

additional Strength to the Constitution, must be very prejudicial, especially when used habitually.

Vitulus. The Calf. See *Bos*.

Viverra, Offic. The Ferret. The Flesh and Gall of this Animal, are recommended in an Epilepsy, and the Gout, and are said to be good against Poisons.

Ulua, Offic. The Gray Owl. The Parts used in Medicine, are the Gall, Fat, and Flesh. The Gall is commended for the *Albugo*, Cataracts, and Films; the Fat for clearing the Sight: the Flesh boil'd in Oil, and that Oil mixed with Sheeps Butter and Honey, is good to heal Ulcers. It is esteem'd by some for the Gout.

Umbra, Offic. The Grunter, or Shadow Fish. It is taken in the *Mediterranean Sea*. The Parts used in Medicine are, the Bones found in the Head, and called in the Shops *Lapides Umbrarum*: These are commended superstitiously for the Colic, and in *France* are commonly set in Silver, and sold by the Goldsmiths under the Name of Colic Stones: For, they say, if it be only carried about one, or worn about the Neck, it not only removes the Pain of the Colic, but prevents its Return.

Unguis odoratus. The Constantinople Sweet Hoof. See *Blatta Byzantina*.

Unicornu. The Unicorn. See *Monoceros*.

Upupa, Offic. The Hoopo. It is a melancholy and unclean Bird, living on Worms found in Dung, Caterpillars, Beetles, and the like. The Parts in Use are the Flesh and Feathers. The Flesh, and its Decoction, according to *Avicenna*, have a specific Virtue against the Colic. And the Feathers applied, are said to mitigate Pains of the Head.

Uranoscopus, Offic. The Star Gazer. It is frequently taken in the *Mediterranean Sea*. The Gall is

used, which is esteem'd a present Remedy in Cataracts of the Eyes.

Ursus, Offic. The Bear. The Parts of this Animal used in Medicine are, the Fat and the Gall. The Fat is emollient and discussive, and is of principal Use in an *Alopecia*; it cures also Pains of the Gout, the *Parotides*, and other Tumors, and heals Ulcers in the Legs. The Gall is recommended to be taken inwardly for the Epilepsy, Asthma and Jaundice. Outwardly it is of Service in cancerous and spreading Ulcers, the Tooth-ach, Dimness of Sight, and other like Diseases. The Skin is good for a Person bit by a mad Dog to lie upon, and serves instead of a Rug to Travellers in the Winter-time.

Urtica marina, Offic. Sea Blubber. It swims on the Water, and is often cast by the Tide on the Shore, being a round, compressed, pellucid Substance, resembling a Jelly, with red Veins interspersed. It agrees in Virtues with the *Lepus marinus*, or Sea Hare.

Vulpanser, Offic. The Shell Drake, Burrough Duck, or Ber-Gander. It lives in maritime Places, and the Fat, which is the Part used in Medicine, is recommended by some, against the *Herpes*, and Tumors of the Face.

Vulpes, Offic. The Fox. The Fat, Lungs, Liver, Gall, Melt, Skin, Blood, the whole Animal, and its Dung are used in Medicine. The Fat is of Use in Convulsions, Contractions, Tremblings, and the like Disorders; also in Pains of the Ears, Wounds of the Head, and an *Alopecia*. The Lungs are consolidating, and abstergent, and therefore of Efficacy in Diseases of the Lungs, and Straitness of the Breast: The Liver of a Fox is of Use in hepatic, and splenetic Cases; the Gall cures a *Pterygium* of the Eyes, the Spleen, removes a Hardness and Tumor

Tumor of that Part; the Skin, with the Hair on it, is successfully wrapt about such Limbs as are refrigerated or infested with Arthritic Pains; the Blood dry'd and triturated, cures the Stone in the Kidneys and Bladder; for which Purpose, it is said to be more effectual if taken recent: The whole Fox, or its Flesh burnt, is commended for Disorders of the Breast: The Animal boil'd in Water or Oil, is a Remedy for Affections of the Nerves, and therefore good in Contractions and Pains of the Joints; and the Dung, in the last Place, clears the Skin from Asperities.

Vultur, Offic. The Vulture. The Flesh, Fat, Brain, Gall, and Dung, are used in Medicine. The Flesh is esteem'd effectual in Cephalic Affections, as the Epilepsy, *Hemicrania*, and the like: The Decoction of it is said to be good for cutaneous Diseases; and the Fat is proper for the Nerves: The Brain strengthens weak Heads; the Gall is said to cure the Epilepsy, being taken in Wine; and the Dung, by its nidorous Smell, to hasten the Birth.

Zibetum. Civet. This Substance is produc'd from the Animal *Zibethicum*, Offic. *Catus Zibethicus*, Schrod. The Civet Cat. The Animal which yields Civet, is a Kind of

Wild Cat, called by the Antients *Hyæna*. There are two Kinds of it, one that comes from *Holland*, and another that comes from *Guinea*, which is browner than the former. When Civet is mix'd with Musk and Ambergrease, or lower'd by a Mixture of any other Powders, it has a very fine Smell; but alone the Smell is disagreeable. It is very little used in Physic. Some rub Children's Navels with it to cure their Colics, and it was formerly apply'd to the *Pudenda* of Women in Hysteric Fits; but this last Practice is not only useless, but hurtful. Civet is a fat and unctuous Substance, of the Consistence of Honey or Butter, and of a most fragrant and grateful Smell. It is hot, moist and anodyne. Civet is not the Seed, nor Suet, nor Testicles, nor *Scrotum* of the Animal called the *Civet Cat*, as some would persuade us, for these have no Smell; but it is a peculiar Excrement, secreted by Nature, and collected in some little Bags of a glandulous Substance, which in the Male are seated between the *Penis* and *Testicles*, in the Female between the *Uterus* and *Anus*. The best is what comes from *America*, and is not adulterated with Butter; the black imported from the *East-Indies* is not good.

CH A P. III.

Of MINERALS.

ACHATES, Offic. The Agate. This is a precious Stone, reckon'd commonly between the opaque and transparent, of different Colours, and mark'd with Spots or Specks,

which are imagined to represent Trees, Fishes, and other Things. The finest comes from the *East-Indies*, the common Sort from *Germany*, *Bohemia*, &c. Great Virtues have been attributed to this

Stone, both cardiac and alexipharmic ; but they seem all to be imaginary.

Adamas, Offic. The Diamond. This Gem is generally mentioned in Catalogues of Drugs, and some Virtues are ascrib'd to it, which are absolutely fabulous.

Ærugo. Rust of any Metal, particularly Copper, called Verdigrise.

Æs, Cuprum, Offic. Copper. This is never used inwardly as a Medicine, unless in Tincture, and that but seldom, because this Metal, and especially its Rust, are reckon'd Poisons ; and any Kind of Food, or even Water, that has stood long in Copper Vessels, is pernicious. The Symptoms produced by this Poison, are Pains in the Stomach and Intestines, excessive Vomitings, Irritations to Stool, Ulcers in the Intestines, sometimes Difficulty of Breathing, and spasmodic Contractions of the Limbs, and lastly Death itself, if the Quantity of Poison be great. The Remedies proper in such Cases, are first, to take a great Quantity of Milk, Oil, or melted fresh Butter ; then to drink warm Water, till the Patient vomits plentifully. Clysters made of Oil, Butter, or fat Broths, are likewise proper ; and lastly strengthening Cordials, and a Milk Diet. Various Recrements of Copper are employ'd in Medicine, as the *Ærugo*, Verdigrise ; *Flos Æris*, *Æs Ustum*, *Squama Æris* ; of which the *Flos*, *Squama*, and *Ærugo* are mention'd by *Hippocrates* ; but the *Ærugo*, or Verdigrise, is the only Recrement now much in Use. It is a green Rust, raised on Copper-Plates ; the Method of making it is thus : The Husks, Stones, &c. of Grapes, being first dried, and after dipped in some strong Wine, are laid for nine or ten Days in Wooden or Earthen Vessels, till they begin to ferment ; then being squeez'd together with both Hands, they are form'd into Balls, which are put into

proper Earthen Pots, and Wine is poured upon them, till about half is cover'd ; the Vessels have a Straw Lid thrown over them, and are set in a Wine Cellar, where the Balls are left in Maceration for twelve or fifteen Hours, being turned every four Hours, that the Wine may penetrate every Part of them. After this the Balls are raised about a Finger's Breath above the Surface of the Wine, and set upon wooden Bars ; the Vessels are then shut again, and left in that State for ten or twelve Days more. After which Time, the Balls emit a strong and penetrating Scent, and are then fit for dissolving Copper. For this Purpose, they are broken and bruised with the Hand, that the outer Part of them, which is dryest, may be exactly mixed with the inner, which is still moist with Wine ; then they are stratified with Copper-Plates in the same Vessels, upon wooden Bars ; the Plates making always the lowest Stratum, and the Balls the uppermost. The Plates are four Inches long, and three broad ; and, if the Copper be new, they must be previously buried for twenty four Hours in Verdigrise, and then heated a little in the Fire. The Vessels being filled in this Manner, and shut close, are left without any farther Management, till the Verdigrise is made, which happens sooner or later, according to the Nature of the Copper. Some Copper yields its Rust in six or seven Days ; some requires twelve or fifteen Days. The Verdigrise thus compleatly extracted, the Plates cover'd therewith are taken out of the Vessels, and their Edges moisten'd with the strongest Wine ; they are then wrapped up in Linen Cloths, dipped in the same, and laid in a Wine Cellar for three Weeks. By this, the Makers tell us, the Verdigrise is nourished, and then it is separated off from the Plates with Knives, and kept for Use. Verdigrise

grise is used by Painters and other Artists, but is seldom prescribed inwardly by Physicians. It is often used outwardly to deterge and dry Ulcers, and to eat away fungous and callous Flesh. It is the principal Ingredient in the *Unguentum Ægyptiacum*.

Ætites, Aquila Lapis, Offic. The Eagle Stone. This Stone is big, as it were, with another Stone rattling in its Womb, of a dark, Ruffet, or Ash-Colour, and commonly of an oval Figure. The oriental is accounted the best. *Ætius* informs us, that if it is tied to the left Arm, it retains the *Fœtus* in those Women who are subject to miscarry. But in Time of Labour it must be taken from the Arm, and tied to the Thigh, and the Woman will be delivered without Pain. Mixed with Bread, it finds out Thieves; for a Thief will never be able to swallow it. *Dale* having quoted *Schroder* for the same Virtues which *Ætius* above ascribes to this Stone in retaining the *Fœtus*, and facilitating Labour, with this Addition, that after Delivery the Stone must immediately be removed from the Thigh, for fear it should draw the Womb to it, subjoins the following Remarks from *Amman*: The natural Effects of the Eagle Stone are commonly magnified, on Account of the Traces of some Signature, while it is believed to be of Service in time of hard Labour, and to facilitate Delivery. This *Dale* does not deny; but this natural Effect of the Stone, was by *Galen*, *Pliny*, and others, immediately blended and overlaid with Superstitions. For who will prove (1) that an *Ætites* tied to the Arm prevents Miscarrying? Which too is an Effect contrary to the former. (2) That the *Ætites* has such an attracting Power, as to make the Womb fall out. *Wormius* and *Valeriola* produce their Observations as to this

last. But in my Opinion, says *Dale*, these Observations are not well grounded. For we know by Anatomy, that the *Uterus* is held fast in its Situation, by Ligaments formed by Nature for that very Purpose. How then can this Stone work such an Effect? Indeed, unless a Power of relaxing, or breaking the Ligaments, be ascribed to it by the forementioned Authors, we cannot admit the Observation of *Valeriola*, which he makes on a Woman of *Valentia*, unless we suppose the *Uterus* to be drawn out of its Place, by the violent and unskilful Hands of the Midwife, which has sometimes been the Case. And yet too many such Absurdities are inserted among Anatomical Observations. (3) There is no Proof that ever this Stone discovered if Poison were mixed with any Thing, as is reported. (4) That it finds out Thieves, being pulveris'd and mixed in their Bread, by their Incapacity of swallowing it, is a precarious Assertion, depending on a fallible Mark, for Deglutition may be hinder'd by other Causes. (5) It neither procures Love, nor increases Riches, which it is said to do. (6) Therefore if we ought to speak the Truth, let us content ourselves with allowing the *Ætites* the same Virtues as the seal'd Earth, in malignant Distempers, and against Poisons.

Alabastrum & Alabastritis, Offic. Alabaster. This is a white Stone very well known, and is a Kind of Marble, but softer. It is found in *Staffordshire*, *Derbyshire*, and other Places. The Stone applied with Rosin, or Pitch, dissolves Hardness; with Cerate, eases Pains in the Stomach, and fastens the Gums.

Alabastrum citrinum, Mont. Exot. Yellow Alabaster. This agrees in Virtues with the preceding.

Alumen. Alum. There are three Sorts of Alum principally used, as the *Alumen rupeum, Offic.* *Alumen rupeum*

rupeum five *Chrysellinum*, Ind. Med. *Alumen factitium*, Mer. Pin. Common Alum. This, together with the Method of making it, from the calcin'd Stone, *Kali*, and Urine, are so well known, that they require no farther Notice. It is esteem'd drying, astringent, and incrassating. Alum melted with a due Proportion of Dragon's Blood, is the celebrated Styptic of *Helvetius*, which is extremely beneficial in uterine Hæmorrhages, and others, and in the *Fluor Albus*. A large Nutmeg with an equal Quantity of Alum; powder'd, and divided into three Doses, if one is given every Morning, is said to cure an Ague. Burnt Alum is used as an Escharotic to eat down fungous Flesh.

The second Sort of Alum, is the *Alumen Rochi Gallis*, Offic. *Alumen Romanum* five *rubrum*, Ind. Med. Roch Alum. It is somewhat like common Alum, except that it is of a palish red. It is imported from *Italy* and *Smyrna*, and is said to be made like other Alum, but without the Help of *Kali* and Urine. It agrees in Virtues with the preceeding.

Another Alum, is the *Alumen plumosum*, Offic. Plumose, or Feather'd Alum. This is found in Quarries in the Island of *Melos*, according to *Tournefort*, where it is produc'd spontaneously, without the Assistance of Art, and differs from the other Species of Alum, only in its Form, consisting of tender soft Filaments, almost like a Feather. Some have erroneously confounded this with the *Lapis Amiantus*.

Ambra grisea, Offic. Ambergrise. The Origin of Ambergrise is a Point that has been long debated among Physicians and Naturalists, some maintaining it to be the Product of the Animal, others of the Vegetable Kingdom. Some assert that it is the Dung of some oriental Bird, and as a demonstrative

Proof of their Opinion, shew the Claws and Fragments of the Beaks of Birds, that are often found inclosed within its Substance, which, being committed to the Fire, emit the Odour of an empyreumatic volatile Salt, which Sort of Smell is almost peculiar to Bodies that derive their Origin from the Animal Kingdom. Others, on the contrary, attempt to prove, that Ambergrise is a Kind of Honey, which is made by the Bees in the Rocks by the Sea-side; and being afterwards attenuated and digested by the Heat of the Sun, becomes a Substance of that Fragrancy as we find it. But these Errors may be soon detected by plain chymical Experiments; for all Dung of Animals, and Honey too, admit of a Solution in aqueous Menstruums; but obstinately resist the most highly rectified Spirit of Wine. Some of the Moderns have thought it to be a peculiar Kind of Resin, or Tear distilled from some Tree as yet unknown to us, in the Eastern Parts of the World, and afterwards transferred to the Sea, where, acquiring a more perfect Digestion by the Heat of the Sun, and by the Sea Salt, it constitutes a resinous Body of that Nature. But, besides many other Reasons, what directly thwarts, and overthrows this Opinion, is, that all resinous Bodies of Vegetables will admit of an easy Solution and Extraction in the highly rectified phlogistic Spirit of Wine; whereas the contrary is true of Ambergrise, which is very difficult to be dissolved in such a Spirit: Besides, it is observed, that inflammable Bodies produced from the Earth, as *Amber*, *Bitumen Judaicum*, and Sea-Coal, are also difficult of Solution, and are by no Means readily united with a very spirituous Liquor. These Things considered, we agree in Opinion with those who hold, that Ambergrise is to be reckoned among the Species of
Bitumens,

Bitumens, and owes its Rise to the Earth, out of whose Bowels it is torn, and washed away by the Waves, and carried into the Sea; for it is found in greatest Quantities in the Sea about the Island of *Madagascar*, where the subterranean Parts are believed to be pregnant with that Kind of *Bitumen*. It is a solid, sebaceous, or fat Substance, not ponderous, of an Ash-Colour, variegated like Marble, and marked often with white Specks. There are two Kinds of Ambergrise, the Ash-Colour'd, and Black. The First is to be preferred, when cleared of all Filth, with a strong Smell, and light, and which, being pricked with a hot Needle, drops a fat odorous Juice. The Black is less esteemed, as being mixed with Earth or Mud, or adulterated, according to some. The Glebes of Ambergrise are sometimes found so big, as to weigh above two hundred Pounds. It is gathered in great Quantities about the *Molucca* Islands, in the *Indian* Sea, and is frequently found on the Shores, both in the *East-Indies*, and in *Africa*. Pieces of it are likewise met with on the Northern Coasts of *England*, *Scotland*, *Norway*, and *Ireland*, being thrown a shore by the Tide. Ambergrise melts by Fire into a gold colour'd or yellow Resin. In distilling Ambergrise, we get first an insipid, then an acid Liquor, or Spirit, and a yellow Oil of a most penetrating Smell, with a small Portion of acid volatile Salt, like Salt of Amber, a black, shining, bituminous Matter remaining in the Retort. From whence it is plain, that Ambergrise consists of fine volatile Parts, intangled in other thicker Parts, both saline and bituminous. This Drug is very much used by Confectioners, and is recommended by Physicians as proper to raise the drooping Spirits, to supply the Defect thereof, and to accelerate their Motions. Hence it is both a cepha-

lic and cordial Medicine, enlivens the Senses, and is very effectual in Faintings, and all other Affections of the Head and Nerves. It is thought to be very instrumental in prolonging Life, and in producing such Effects, as are necessary for Generation. This Opinion prevails chiefly among the Eastern Nations. It is used both outwardly and inwardly. The Dose, in Substance, is from one to four Grains, taken in a poached Egg, or in a Glass of Wine with Sugar and Spices. Ambergrise is sometimes counterfeited by mixing a little Musk and Civet, with Storax, *Labdanum*, and Aloes Wood. And sometimes it is adulterated, by mixing with it some of the above mentioned Perfumes, and a great deal of Bull's Blood dried.

Amethytus, Offic. The Amythest. This is a precious Stone, of a Violet Colour, which arises from a Mixture of Red and Azure. It is found in *India*, *Arabia*, and *Armenia*. It is good to stop a Looseness, and to absorb the acid Particles when too much abounding in the Stomach, which Virtue it has in common with other alkaline Substances. It is pretended, that it prevents Drunkenness, being worn on the Finger, or bruised, and drank in Powder, but this Virtue is only imaginary. Hence it receives its Name.

Amiantus, Offic. Earth-Flax. This is a kind of scissile Stone, consisting of Filaments, in such a Manner as to be capable of being wove into a sort of Cloth. It is remarkable for resisting the Force of Fire, so as not to be consum'd by it; it is seldom or never used in Medicine, that I know of; tho' Superstition has ascrib'd some Virtues to it, as that it resists Magic and Witchcraft; but as the Legislator has thought proper to abrogate all the Laws before in Force against Sorcery, upon a full Conviction, of there being no such Thing, I think

we may, with equal Reason, strike the *Amiantus* out of the Catalogue of Simples.

Ampelitis Terra, Offic. Canal-Coal. This is a fossile, stony, friable and black Kind of *Bitumen*. It is esteemed drying and digestive, and to be a good Application to malignant Ulcers. It is said to kill those Worms, which eat Vines, and hence has been applied to the *Abdomen*, in order to destroy Worms in the Intestines.

Antimonium, Offic. Antimony. This is a metallic, solid, ponderous and friable Substance, almost of the Colour of black Lead, consisting of long shining *Striae*, or Needles. It is found in Mines, in many Parts of the World, of different Colours, but the *Hungarian* and *Transilvanian* Antimony, of which little or none comes to us, is esteemed much the best for medicinal Uses. What we are furnished with is not the pure Mineral, but that melted and cast into a pyramidal Form. We are obliged to *Basil Valentine* for discovering the medicinal Uses of Antimony. It was this Chymist who first used Antimony internally, and enriched Medicine with many Preparations of this Mineral. It is said, that having thrown away some Antimony, which he had used in the Fusion of Metals, he observed some Swine, who had accidentally eaten it, to purge considerably; and that, very soon after this, they became sleek and fat. This gave him the Hint of trying what it would do in human Bodies; with this View he made a Multitude of Experiments with it, as appears by his Treatise, intitled, *Currus Triumphalis Antimonii*, and determined its Efficacy. After him *Paracelsus*, *Matthiolus*, *Angelus Sala*, *Jacobus Launæus*, and many other learned Men, pleaded the Cause of Antimony, and held it in great Esteem. There were, however, others who looked upon the internal

Use of Antimony as most pernicious, amongst whom was *Jacobus Grevinus*, who in 1566, published a Treatise, in which he represents Antimony as a most dangerous Poison, and advises the Magistrates to prohibit the Sale of it, as they had done that of Quicksilver and Orpiment. His Council was taken, and the medicinal Use of Antimony was forbid the same Year, by a Decree of the Faculty of Physic at *Paris*, which was confirmed by one of the Parliament; and in 1609, *Paulmier*, a Physician of *Paris*, was expelled the Faculty for using it in his Practice. In the Year 1637, the same Faculty allowed its Use as a Cathartic; and in 1666, the free Use of it was permitted by the Parliament of *Paris*, in Consequence of an Opinion of the Faculty of Physic given in its Favour. Antimony was esteem'd by the Antients, astringent and refrigerating, was principally used externally, as in *Collyria*, against Fluxions and Exulcerations of the Eyes, and by way of Cosmetic to tinge the Eye-brows and Eyelashes of a black Colour. It is very astonishing that so many Physicians, and some of them Men of Learning should so strenuously oppose the Introduction of Antimony, into Medicine, and without any Manner of Evidence from Experience, treat it as a deleterious Poison; for it appears that Antimony reduced to a Powder is neither Emetic nor Cathartic, tho' if given in very large Quantities, it may perhaps by its *Stimulus* and Weight gently loosen the Belly; and so far is it from being deleterious, that it is an excellent Alterative in the *Scabies*, or Mange of Horses, other Cattle, and Man, and those who take it are observed to grow fat after it, and to enjoy a better State of Health than before; and it is a very great Error to imagine as some have done, that Antimony boiled or macerated in Water,

Water, both vomits and purges, for it does neither. But if Antimony is mixed with an equal Quantity of Nitre, and put gradually into a red hot Crucible, so as to melt, it then becomes violently emetic, and is called *Crocus Metallorum*; and it further communicates an emetic Quality to Wine, or almost in any other Liquor in which it has been infused; and this Proportion of Nitre with the Antimony is said to render the Preparation more emetic than any other; for if either more, or less, Nitre is us'd, it is proportionably less emetic. Antimony consists of a sulphureous, and reguline Part, which when united together operate as an Alterative only; but as soon as the Union is dissolved, the Sulphur becomes emetic and cathartic, and the reguline Part drastic and virulent. If Antimony in Powder is boiled in Water impregnated with an Acid, an Alkali, or any Thing oleous, this will in some Measure dissolve the Union betwixt the sulphureous and reguline Parts, and communicate to the Liquor, the Qualities of the Parts it dissolves; thus an Acid dissolving in the reguline and metallic Parts renders the Liquor extremely emetic and drastic; but an alkaline or oleous Liquor acting upon the Sulphur, renders the Liquor more mildly emetic, cathartic, and sometimes diaphoretic. Hence we may conceive the Reason why crude Antimony may sometimes by Accident operate in the *Primæ Viæ*, that is, if it meets with any Thing acid, alkaline, or oleous therein, capable of dissolving the Union betwixt the reguline and sulphureous Parts. *Hoffman* asserts, that he has seen very great and good Effects from crude Antimony mix'd with Sugar; in an Atrophy, and Pains of the Limbs; and crude Antimony alone powder'd, is said to be excellent in paralytic Disorders, and Diseases of the Breast. The ce-

lebrated *Kunckel*, was cur'd by the Advice of *Sennertus*, of violent Pains in his Arms, by taking crude Antimony in Powder; and he afterwards found great Relief in the Gout, by taking crude Antimony mix'd with Sugar. And the Remedy for the Gout so much advertis'd of late Years, under the Name of the Gout and Rheumatic Powder, consists of nothing but equal Parts of crude Antimony and Nitre, reduc'd to a fine Powder, till no Particles of the Antimony remain visible; the Dose is twenty-seven Grains of both together. Crude Antimony is also an excellent Remedy for the Rickets, Worms in Children, the *Fluor Albus*, and all Diseases from glandular Obstructions; but *Geoffroy* advises to begin with a very small Dose, and increase it gradually, to avoid at the Time of taking it all Acids, and to mix it with treble or four times the Quantity of some Absorbent, as the *Oculi Cancrorum*. We find in the *Brandenburgh Dispensatory* a Preparation under the Title of *Morsuli Restaurantes Kunckelii*, consisting of crude Antimony, mixed with some aromatic and oleous Ingredient, and Sugar: These are greatly celebrated in *Germany* for putrid Fevers, the Itch, and Ulcers thence arising, for carrying off the Relics of the Small Pox, and in a virulent *Gonorrhœa* of long standing; and two Parts of Antimony with one of the Peruvian Bark, given in the Quantity of two Drams for a Dose, is esteem'd excellent in an intermitting Fever, and is said even to cure one that is continual; but of this I have no Experience. It is further asserted, that crude Antimony mix'd with melted Wax, or as it is called *Cerated*, is an excellent Remedy in a *Diarrhœa* or Dysentery. I think it is generally agreed by Chymists, that the Sulphur of Antimony differs very little from common mineral Sulphur; but that it operates

operates in a different Manner, is owing to a Portion of the reguline Part, from which it is very difficult to free the Sulphur. Upon the Whole, Antimony may be esteem'd one of the *Herculean* Remedies, for conquering obstinate Distempers, and if us'd with Judgment and Discretion, it is as innocent as any other Medicine. It is therefore astonishing, that any Instances should occur of Patients labouring under obstinate Disorders, who have been deserted, or at least not cur'd, by Physicians, who have afterwards found a Remedy in Antimony, administer'd by the Hands of Quacks, who don't so much as pretend to any Degree of medicinal Knowledge.

Aquæ minerales. Mineral Waters. These differ extremely on Account of their Contents. Those which are cold, and impregnated with mineral and diuretic Particles, are called *Acidulæ*, but improperly; for *Hoffman* has demonstrated, that they are of an alkaline, not of an acid Nature. The Principal of these are, the Waters of *Tunbridge*, *Astrop*, *Knareborough*, *Road*, *Ipswich*, *Sparw*, *Islington*, *Felsted*, *Oulton*, and *Cannock* in *Staffordshire*: The principal saline and cathartic Waters are, those of *Epsom*, *Atton*, *Kensington*, *Colchester*, *Richmond*, *Lambeth*, *Stretham*, *Dulwich*, *North-Hall*, *Scarborough*, *Woodham Ferrers*, *Holt*, and *Cheltenham*. The principal hot sulphureous Waters are, those of *Bath* and *Buxton*; *Bristol* and *Matlock* Waters are also somewhat warm. All these act by their Contents; and perhaps the Water itself may exert very great Efficacy in the Cure of Distempers. There are such a vast Number of, and infinite Variety in mineral Waters, that it would require a whole Volume to explain this Subject; I must therefore refer the Reader to what *F. Hoffman* has wrote upon this Subject.

Arena maris. Offic. Sea-Sand. This dries up the redundant Moisture in hydropic Constitutions, if the Patient lies cover'd with it as far as the Head. It is sometimes heated, and applied by Way of dry Fomentation instead of Salt or Millet.

Argentum. Offic. Silver. Some Preparations from this Metal are used in Medicine, tho' I don't know, that by itself it is possess'd of any Virtues, tho' some were formerly ascrib'd to it, as it should seem without any real Foundation. It was said to be peculiarly adapted to Disorders of the Head and Brain, and was therefore recommended in an Epilepsy, Apoplexy, Vertigo, Melancholy, Weakness of Memory, and Folly, if this last may be esteem'd a Distemper. *Tachenius* tells us of an illiterate Silversmith, of so happy a Memory, that he could repeat Word for Word, whatever he heard; and this it seems was ridiculously ascrib'd to his swallowing Silver, as he work'd it.

Argilla. Offic. Clay. Clays of all Sorts are esteem'd drying, astringent, and abstergent.

Arsenicum. Arsenic. Of this there are three Sorts. *Arsenicum Album*, Offic. White Arsenic, or Ratsbane. *Arsenicum Flavum*, Offic. Yellow Ratsbane. *Arsenicum Rubrum*, *Factitium*, Offic. Red Arsenic. Arsenic properly so called, is a Substance extracted from an Ore found in *Saxony* and *Bohemia*, named *Cobalt*. As this Original of Arsenic, and the Way of preparing it, are not commonly known, I shall here shew what is the Nature of Cobalt, and in what manner Arsenic, and the other Substances found with it in the Ore, are extracted, also what are the Kinds of factitious, or artificial Arsenic. The Cobalt of the Shops, *Cadmia Metallica*, of *Agricola*, is a ponderous, hard, fossil

Substance

Substance, almost black, not unlike Antimony, or some Kinds of Pyrites, emitting a strong sulphureous Smell when burnt, often mixed with Copper, sometimes with Silver. It is dug out of Mines in *Saxony*, near *Goslar*; in *Bohemia*, in the Valley of *Joachim*; and in *England*, on the *Mendip Hills*, in great Quantities. It has so strong a corrosive Quality, as sometimes to turn and ulcerate the Hands and Feet of the Miners, and is a deadly Poison for all known Animals. All the three Kinds of Arsenic are extracted from it; and it likewise serves to make *Zaffera*, used by Potters, in giving a blue Colour to their Vessels; and the *Encaustum Cæruleum*; or that Kind of Blue sometimes used by Painters, and often by Women to mix with their Starch, for whitening and stiffening Linen. The Way of making all these, is taught by *Kunkel*, in his Art of making Glass. To this Purpose, they put the Cobalt in a calcining Reverberatory Furnace, made for that Purpose, in such a Manner, as that the Flame may just graze upon the Ore, and so set it on Fire. The Flame of the Ore is blue, accompanied with a copious Smoke, which is receiv'd on the Cieling of the Furnace, and from thence convey'd out through a large Funnel, made of Boards, and above an hundred Ells in Length; but the greatest Part of it sticks to the Inside of the Funnel, in Form of a whitish Soot; and every six Months the Labourers sweep the Funnel with Brooms, and carefully preserve this Soot, which afterwards serves to make both white, yellow, and red Arsenic. white Arsenic is made only by sublimating the Soot in Iron Vessels, into an opake Substance, sometimes white and shining like the *Encaustum Album*, sometimes streak'd with red and chrystalline Veins. Yellow Arsenic is made of the same Soot sublim'd

with common Sulphur, in the Proportion of one Part of Sulphur to ten of Soot. The sublimed Mass is of a yellow Colour, solid like Sulphur, shining, and not altogether opake, easily broken, but not easily friable, or easily crumbled into Dust, and distinguishable from Orpiment, by not taking Fire when thrown upon burning Coals, as Orpiment presently does. Red Arsenic is made of the same Soot and Sulphur, mix'd with a small Proportion of a metallic Substance, called the *Spuma of Copper*. The sublimed Mass is solid, of a cinnabarine Colour, and opake. The calcin'd Cobalt, after the Evaporation of the Fumes or Smoke, is powder'd and calcin'd again, and this Operation is repeated till the Calcination is judged to be perfect. Then being very finely powder'd it is mix'd with two or three times the Quantity of powder'd Flint Stones, and moisten'd with a little Water in large Tubs, where in a very short time it becomes a solid firm Mass, called *Zaffera*, as already said, which is used by the Potters, Glass-Men, and Enamellers. If two Parts of calcined Cobalt, one Part of Potash, and three of common Sand, be melted together, a vitrious, opake, and bluish Mass is produced, which is ground in Mills to a very fine blue Powder, which is called *Smaltum*, or *Encaustum Cæruleum*, used by Painters, and in washing Linen. Arsenic consists of an acid Salt, and a Kind of mercurial or metallic Substance, which discovers itself when it is distilled in a Retort, mixed with Soap, Suet, Oil, or any Fat, or oily Substance; for with a strong Degree of Fire the Arsenic will be raised into the Neck of the Retort in a metallic Form, like Antimony. The Sulphur contained in Arsenic is in so small a Proportion, that it does not flame when cast on burning Coals, though Cobalt contains a great Quantity

tity of Sulphur, which consequently has been separated from the arsenical Parts in the Calcination and Deflagration, and so evaporated; but the Smell of Arsenic proves, that some Sulphur still remains in it. Arsenic is very volatile; for if any Quantity of it is put into a Crucible, and set over the Fire, it will presently evaporate in white Fumes, without leaving any Remainder. If melted, stratified, or cemented with Copper, it turns it of a silver Colour; but, as it impairs its Ductility, this Change of Colour is rendered of no Use. Arsenic is a powerful Corrosive, and reckoned among the strongest Poisons. When taken inwardly, it causes many bad Symptoms, of which some are common to it with other Poisons; such as Anxieties, Swoonings, Palpitations, a sudden Dejection, or Sinking of the Strength and Spirits, Stupors, Deliriums, convulsive Motions of the Limbs, Palpitations, Heat and Corrosion of the *Fauces*, Thirst, Fevers, Vomiting, Pain in the Stomach, and cold Sweats. Other Symptoms are peculiar to this Poison, such as not only an Erosion of the Stomach, but an Extenuation of it, in such a Manner, as that all its Coats taken together, shall not be thicker than a Poppy Leaf in many Places; and at the same time, the small Intestines are found corroded and perforated; a sudden Swelling, and Sphacelation of the Parts of the Body; and, after Death, a more speedy Putrefaction than is observed in other Cases, especially in the Parts of Generation belonging to Men. If Death does not immediately follow, the Patient becomes afflicted with an hectic Fever, Marasmus, Palsy, Tremors, and sometimes Madness. Some recommend Rock Crystal reduced to an impalpable Powder, as an Antidote against Arsenic; but I should depend much more upon drinking large Quantities of Milk, Oil, or

fat Broths, while the Poison remains in the *Primæ Viæ*; but after it has got into the Blood, alexiterial Medicines are to be used, such as *Venice Treacle*, *Mithridate*, *Bezoar*, *Contrayerva Root*, and such like, and afterwards a Milk Diet. Though Arsenic be a quick Poison both for Men and Brutes, it is recommended by some in intermitting Fevers; but, let it be never so much prepared and corrected, its deleterious Qualities are only lessened, never wholly remov'd; and therefore, though it may be a good Remedy for the present, it will afterwards prove a Poison, and bring on very dismal Symptoms. After giving the above Account of the Opinion of *Geoffroy*, with Respect to the internal Use of Arsenic, I need not caution the young Practitioners in Physic to hold as suspected the Advice of *Pitcairn*, who directs Arsenic to be given internally in a Dysentery; and of *Zacutus Lusitanus*, who advises the Use of it in Clysters for the same Distemper.

Asphaltus & Bitumen Judaicum, Offic. Jews Pitch. The *Asphaltum* of *Dioscorides*, and *Bitumen Judaicum* of the Shops, called *Carabe* and *Gummi Funerum* by *Serapion*, and by others *Mumia*, is a solid, brittle, ponderous Substance, of a red, blackish, or dark Colour; easily inflammable, and of a strong bituminous Smell, especially when warm, and fusible by Fire. It is found in several Parts, but the best is that which comes from *Judea*, where it is gathered in the Dead-Sea, called from thence the Lake *Asphaltites*. It is probable, that a great Quantity of this *Bitumen* rises from the Bottom of that Lake to the Surface of the Water. At first it is so soft, viscid, and glutinous, that it can with Difficulty be separated from any Part which it touches, but in Time it grows harder than Pitch; and from the Place where

where it is found, it is called *Carabe* of *Sodom*; *Carabe* being used often by the *Arabians* to denote any solid *Bitumen*, and the *Dead-Sea* being the Lake where *Sodom* stood. The Names of *Gummi Funerum* and *Mumia* were given it, because the common People, among the *Egyptians*, used it in embalming and preserving dead Bodies. The true *Bitumen Judaicum*, is seldom brought to us; for *Dioscorides* directs us to make Choice of that which shines like Purple, and to reject the black Kind as being foul, and of small Value; but all that we see of that Kind is black; though even that, when broken in Pieces, appears against the Light, to be of a Saffron Colour; and therefore it is possible this may be the same Kind recommended by *Dioscorides*, only boil'd to a hard Consistence in Brass Kettles before it is sent to us. It is of a discutient, emollient, and agglutinating Quality. It dissolves coagulated Blood, and promotes the menstrual Discharge.

Asteria Gemma, Offic. The Bastard Opal, or Star Gem. This Gem is transparent like Crystal, but of a harder Nature. 'Tis thought to be a Species of the *Opal*, but neither the one nor the other are now kept in the Shops. If carried about with one, 'tis thought to procure Sleep, and prevent frightful Dreams.

Astroites seu Stellaris Lapis, Offic. Star Stone. This Stone is porous, moderately hard, and white, and as big sometimes as a Man's Head. It is found in some Quarries in *England* and *Germany*. It is esteem'd antipestilential, and is said to destroy Worms in Children.

Auripigmentum, Offic. Orpiment. The Orpiment of the Shops, is an Arsenical Juice, in squamous or foliaceous Glebes, like the *Lapis Specularis*, the *Squamae*, or *Strata*, being easily separated from each o-

ther. Orpiment is of three Kinds; one of a Gold Colour, the second of a deeper red, or Cinnabarine Colour, mix'd with yellow; and the third greenish and yellowish, mix'd with a large Proportion of Earth, and therefore the least valuable. These three Kinds are found in the Veins of Gold, Copper, and Silver Mines; but we know not what was the other Kind of Orpiment mention'd by *Dioscorides*. Orpiment is of an acrid Taste, soluble in Oil, and inflammable by Fire, emitting a thin Flame, with a great deal of Smoke, smelling strongly of Sulphur or Garlick. This Smoke, if collected, turns to yellowish Flowers like Sulphur, and a red, or Blood colour'd Mass remains behind, which, when cold, concretes into a hard solid *Regulus*, like Cinnabar, called by some, red Orpiment, or *Realgar*. If the Orpiment be kept in a subliming Vessel for a long Time on the Fire, the whole Mass is rais'd to the upper Part of the Vessel, and there concretes into a beautiful, red, pellucid Substance like a Ruby, only a small Quantity of metallic Earth remaining at the Bottom. The first Fumes which come from this *Regulus*, will turn Copper white and brittle. Orpiment therefore must consist of the same Parts as common Sulphur, with some Mineral Particles mixed with them; or it is composed of an acid Salt, entangled in Particles of Mercury, and a bituminous Substance. Its corrosive Quality arises from the acid *Spicula* stuck into the Particles of Mercury; but it has that Quality in a less Degree than corrosive Sublimate, because of its bituminous Part. It is less inflammable than Sulphur, because the Energy of the acid Salts contain'd in it is weaken'd by the Mineral Parts; and, from its corrosive Quality, it is deservedly reckon'd among Poisons. It was antiently

used by Physicians to eat away fungous Flesh, but is now laid aside in that Intention, Chymistry having furnish'd us with much better Cathereticks. It is used sometimes by Barbers, with a Mixture of Quick Lime, as a Depilatory, to eradicate the Hairs of any Part of the Body; but if they let it lie on too long, it corrodes the Skin. Some Physicians recommend the internal Use of Orpiment, in Substance, in a purulent *Phibisis*, accompanied with Expectoration, and in Asthmas. The Fumes of it may likewise be received at the Mouth in the same Intentions, and the *Chin-se* reckon it among the purgative Medicines. However I cannot think (says *Geoffroy*,) the inward Use of this Medicine in any Respect allowable; for it is a strong Poison, destructive to the Nerves, and accordingly is found by Experience to bring on very terrible Symptoms, such as Spasms in the Hands and Feet, Stupors and Contractions, cold Sweats, Palpitations of the Heart, Faintings, Thirst, inward Burning, Vomiting, Belly-ach, Erosions, violent Pains, and Death itself, according to the different Doses of this Poison; and in the Bodies of such as die in this Manner, the *Oesophagus*, Stomach, and Intestines are found to be inflamed, corroded, and perforated in several Places. The Antidotes for Orpiment, and all other Arsenical Substances, are whatever is able to blunt the Acrimony of these corrosive Medicines; such as Milk and Oil, drank in great Quantities, fat Broths, the Juice of Mallows, or Marshmallows, Decoctions of Flea-wort, and Linseed, Marsh-mallow Roots, and such like. Orpiment or Arsenic, worn about the Neck like an Amulet, cannot be so hurtful as some imagine; neither do we believe it of any Virtue in preserving against the Plague, or pestilential Diseases.

Aurum, Offic. Gold. The Use of Gold in Physic was unknown to the antient Greeks. The Arabians first talked of its Medicinal Virtues, and mixed it in their Compositions, being previously reduced to thin Leaves, upon a Perswasion that it comforted the Heart, and exhilarated the Spirits; and that therefore it was proper in Palpitations of the Heart, and in Melancholies. The Chymists add further, that a most powerful fixed Sulphur is contained in Gold, which, if it be mixed with the Blood, preserves it from all Corruption, and restores and revivifies human Nature in the same Manner as the Sun, the great Original of this Sulphur, enlivens Nature. Many Authors are of a quite different Opinion, because the Effects of Gold, are found not to answer these great Pretensions; and it may be reasonably question'd, whether Gold be at all useful in Physic. The Virtues of the Chymical Preparations of Gold are equally dubious, because they seem to derive their Energy, not from the Gold; but from the Menstrua, and other Substances mixed with it.

Belemnites, & *Lapis Lyncis*, Offic. Thunder Bolts. The *Belemnites* is a round, oblong Stone, ending in an obtuse Point, sometimes white, sometimes of a Gold, and sometimes of a dark Colour. Some of these Stones are solid, others hollow, and it is distinguished by Lines drawn from the *Axis* to the Circumference. It is commonly about an Inch in Length and Thickness, though some have been found as large as a Man's Arm, and in every one of them there is a Fissure or Slit running thro' its whole Length. The Name *Belemnites* comes from a Greek Word, which signifies the Point of an Arrow: It is also called *Dactylus Idæus*, from its Resemblance to a Finger, and its being found in Mount *Ida*, in the Island of *Crete*; but it is
dug

dug up likewise in the *Alps*, and in many Places of *France* and *Germany*. It is without Ground taken for the *Lapis Lyncurius* of the Antients, since it is evident, that by that Word *Dioscorides* understood Amber, which he tells us, was by some taken to be the concreted and indurated Urine of the *Lynx*. The *Germans* say, that this Stone is good against the Night Mare, and the Stone in the Kidneys. It is given in Powder, from half a Dram to a Dram in any convenient Vehicle.

Beryllus, Offic. The Beryl. This is a precious, shining, transparent Stone, the Colour of which is commonly a Sea green; but there are some of the Colour of Oil, or of Garlick, or pale, or yellow, or of the Colour of Gold: They call this last *Chrysoberillus*; that is to say, gilded Beryl. It is found in several Parts of *India*. It is not likely that Gems should be possess'd of any Medicinal Virtues, but those ascrib'd to this are, that when powder'd, and given internally, it stops Hæmorrhages, and is good for Disorders of the Liver, Eructations, and Diseases of the Mouth, Face, and Throat.

Bismuthum, Offic. Bismuth, Marcasite of Silver, or Tin Glafs. *Bismuth* is a metallic, fusible, but not ductile Substance, very brittle and heavy, and distinguishable from Lead and Tin by its Colour, which is sometimes shining like Silver, sometimes of a faint Purple, resembling the *Regulus* of Antimony, but consisting of broader *Laminae*, and staining the Fingers. It is prepared by Artists, by being first torrefy'd, and then melted into a *Regulus*. It is often found in the Silver Mines; and wherever the Miners find *Bismuth*, they conclude they shall find Silver; and hence they call it the Proof of Silver. The Mines of *Bismuth* are in *Bohemia* and *Misnia*. Some pretend that it may be extracted from

Cobalt melted into a *Regulus*, by a particular Process; but this is not certain. *Bismuth* seems to have been unknown both to the *Greeks* and *Arabians*; for the *Arabian Marcasite* was the *Lapis Pyrites*. It is very seldom used in Physic, tho' some prepare Flowers from it, which they say are diaphoretic, but most Physicians have been afraid to use it inwardly, because of the Arsenical Parts contain'd in it. The Magistery of *Bismuth* is prepared by dissolving the Metal in Spirit of Nitre, then precipitating it with a Solution of Sea Salt in Water. This Precipitate, being dulcorated by frequent Lotions, becomes a very white Powder, much valued by the Ladies as a Cosmetic, and much used by Dealers in Hair, to improve the Colour of it when dark or red. Pewterers mix it with Tin to harden it, and give it a more shining Colour.

Bitumen, Offic. *Pissasphaltos nativum*, Schrod. Common Fossile Pitch. The *Bitumen* is produc'd in *Apollonia*, near *Epidamnus*, and is carried down the *Ceraunian* Mountains by the Current of a River, and thrown upon the Shores, where it concretes into Masse, and smells like Pitch mixed with Brimstone. The *Pissasphaltos* of *Dioscorides*, and of the Shops, or Mineral Pitch, is a black or red Kind of *Bitumen*, of a fragrant and not unpleasant bituminous Smell, viscid, or of a middle Consistence, between *Petroleum*, and a solid *Bitumen*, not unlike the common Pitch, fusible by Fire, conrescible by Cold, and easily inflammable. It is compounded of two Greek Words, which signify Pitch and *Bitumen*, and the Compound might be render'd a bituminous Pitch, or pitchy *Bitumen*, the Reason of which Name is not that it consists of an artificial Mixture of these two Substances, but it smells like such a Mixture. It distils from

Rocks, or springs from the Earth in several Countries. In *Italy* they use that which is found in the *Campania di Roma*, about sixty Miles from the City, near a little Town called *Catho*. It ouzes thro' the Crannies of Rocks in the Summertime, of the Consistence of Honey, of a black Colour, and penetrating Smell. There is likewise a plentiful Spring of this *Bitumen* in *Auvergne* in *France*, which is soft, and black like Pitch, and of a bituminous Smell. If it be kept a great while, it grows hard, retaining still something of its fatty Consistence, and never grows so dry or hard as the solid *Bitumens*. Fresh *Bitumen* is digestive, maturating, and resolvent. It is used in ripening Buboës, resolving Tumors, discussing sciatic Pains, and to strengthen luxated Parts after they have been reduced. A Mixture of this, and slimy or muddy Clay, is called *Maltha*, and was used as Mortar in building the Walls of *Babylon*, according to *Vitruvius*.

Bolus, Bole. There are many fat Earths used in Medicine, which go by the Name of *Boli*, Boles, as the

Bolus Armenia, Offic. Bole Armoniac. It is an earthy Substance, of a pale yellowish Colour, inclining somewhat to red. It is ponderous, pinguious, easily friable, and of a styptic Taste. It is dig'd out of the Mines in *Turky*, and thence brought to us. It is, at present very rare with us; for what is found in the Shops, approaching to the Colour of red Ulcer, is imported from *Spain* and *Normandy*, and is thought to be little different from the *Rubrica Sinopica*. It is an Alexipharmic, and corrects those Acidities in the Blood which are prejudicial to Health. It is astringent in some Degree, and, for that Reason, used in Fluxions of Humours. When apply'd externally, it is of a drying Quality, and induces

Cicatrices on Wounds. *Fracastrorius* says, that *Bole Armoniac* given to a Person almost in the Agonies of Death, from the Bite of a Spider, instantly cur'd him.

Bolus Armenia alba, Mont. Exot. White Armenian Bole. This Bole is brought from *Armenia*. It agrees in Virtues with the preceeding, but is not to be met with in our Shops.

Bolus Armenia lutea, Mont. Exot. Yellow Armenian Bole. This Bole adheres to the Tongue, is a strong Astringent, and said to be a powerful Resister of Malignity.

Bolus Bohemica, Offic. German Bole. It is an earthy Substance, of the same Colour with the Bole Armoniac, but somewhat fainter. It has some Veins of a yellowish Colour running thro' it, and is heavy, easily friable, and of an astringent Taste. It is dig'd from the Mines of *Bohemia*, and thence imported to us. It agrees in Virtues with the Bole Armoniac, and is sometimes kept in our Shops. *Aldrovandus* informs us, that it is a very efficacious Medicine in all exanthematous Fevers.

Bolus candidus, Offic. Unicornu Minerale, Schrod. White Bole. This Bole is dig'd from the Earth at *Gran* in *Hungary*, and at *Goltberg* in *Liege*. It relieves and mitigates Pains of the Head, strengthens the Brain, and is singularly efficacious in curing Dysenteries, and the *Fluor albus*.

Bolus rubra nostras, Ind. Med. French Bole. *Dale* confesses he knows nothing of this Bole. I take it to be the red French Bole, which is got in many Parts of *France*. *Pomet* gives the following Account of the French Boles. "The Bole which we sell, says he, is found in several Parts of *France*, about *Blois* and *Saumur*, or *Bourgogne*, and which is of various Colours, as grey, red, and yellow. The Yellow is the most valuable, because it passes the readiest for Bole of the *Lez*

"want

“*vant*, and because it fits the Gil-
 “ders best. As these Boles are the
 “dearest, because of the Charge of
 “transporting them to *Paris* from
 “*Blois* and *Saumur*, we prefer that
 “of *Baville* and other Places about
 “*Paris*, because the Peasants bring
 “it at a cheaper Rate, than we can
 “buy the othet. The best is the
 “cleanest, smoothest, and well co-
 “lour’d, of a light yellowish red,
 “which being tasted, seems to melt,
 “like Butter, in the Mouth. Its
 “Thickness is known by sticking to
 “the Tongue. The counterfeit or
 “adulterate Bole is of a sad-deep
 “red, sandy, and gritty, being not
 “of a third Part of the Price of the
 “True. It is very drying and a-
 “stringent, good against Fluxes and
 “Gleets. It thickens thin Humours,
 “resists Putrefaction, and expels
 “poisonous Bodies. It is also used
 “in Spitting of Blood, bleeding
 “Wounds, and also to consolidate
 “broken Bones, and strengthen
 “weak Limbs.”

Bolus Toccavienfis, Offic. Tran-
 sylvanian Bole. This Bole has all
 the Characteristics of the true *Ar-
 menian* Bole, and melts in the Mouth
 like Butter. It is digg’d from the
 Earth in *Transylvania* near *Tokai*. It
 is greatly celebrated as an efficacious
 Medicine in Catarrhs and the Plague.
 It was first apply’d to medicinal Pur-
 poses by *Crato*, who prefers it to the
Armenian Bole brought from *Turky*.
 I cannot determine, says *Dale*, whe-
 ther it is really different from all the
 preceeding or not.

Borax. A Kind of Salt used in
 mechanic Arts and Medicine. It is
 also called *Chrysocolia fascitia*, *San-
 terna Plinii*, & *Tincar*, Offic. *Ni-
 trum fascitium*, *Arabice Borax*.
 Worm. Borace. *Borax* is a Salt,
 whose Composition, whether natural
 or artificial, is but little known. Na-
 tural History, as well ancient as mo-
 dern, affords us but little Light or

Information concerning this strange
 Salt, and from what we can learn of
 it from thence, we are not sufficient-
 ly instructed to conclude, that it is
 the true *Chrysocolia* of the Ancients;
 though the *Spaniards*, who work
 in the Mines of *Chili*, the *Venetians*,
 and other Moderns, still give it that
 Name, which they found in ancient
 natural History. *Pliny*, speaking of
 the *Chrysocolia* of his Time, divides
 it into two Kinds; the Native, which
 was taken out of the Mines of *Cop-
 per*; and the factitious, which was
 made by stirring and beating the U-
 rine of young Children in Mortars of
 Copper. *Paul Herman* in his *Ma-
 teria Medica* says, that they make
Borax in the *East-Indies* of a nitrous
 Earth, which, after they have cal-
 cin’d, and reduced it to Powder,
 they boil and make thereof a strong
 Lixivium; this they afterwards ex-
 pose to the Air, in order to make it
 run into Crystals; that this Salt ne-
 ver comes to a greater Perfection in
 that Country; and that it is in the
 Places whither it is transported that
 they purify it. By these two De-
 scriptions, and especially *Pliny*’s, it
 appears, that we are at a Loss for
 the true *Borax* at present; for in the
 Essays which *Geoffroy* says he made
 on the Solution of this Salt in Water
 without Addition, he could never
 find a single Atom of Copper, where-
 as there ought to have been a con-
 siderable Quantity, had it been the
Chrysocolia of *Pliny*. Nor had I, says
 he, any more Reason, from what I
 could discover, to think that it might
 be made of a nitrous Earth, taken in
 the Sense and according to the Pro-
 perties of our Nitre at present, be-
 cause it crystallized in a different Man-
 ner, and fused upon Coal. But if
M. Herman, by his *Indian Nitre*
 means the Nitre of *Agra*, and some
 other Places in the *East-Indies*, which
 is a *Natrum*, and consequently a
 strong Alkali, *Borax* would be an al-
 caline

caline Salt of much greater Penetration, and of a much more acrimonious Taste than we find it, unless they have a Way of making this Salt, by adding to the *Natron* some sweetening Substance to take off the Acrimony, and so making an imperfect *Sal Salsum*, in which the Alkali is predominant. *Geoffroy's* late Brother, in the Lectures which he read at the Royal College upon the *Materia Medica*, and after the Perusal of some Memoirs of a German Traveller called *M. Narglin*, a good Naturalist, who had made many Essays upon that Salt, both in the *Indies* and at *Venice*, where it was formerly purify'd, tells us, "That *Borax* was produc'd in several Parts of the *East-Indies*, but most plentifully in the Dominions of the Great *Mogul*, and in *Persia*, that, in several Places of those two Countries, there flow'd gently from different Mines, but principally from those of Copper, a salt Water, muddy and greenish, which was carefully preserv'd; that, after it was evaporated to a certain Consistence, they poured it into Pits sunk in the Earth, and lined with a Paste compos'd of the Mud deposited from the same mineral Sources, and the Fat of Animals; that they laid over these Pits a Cover of a convenient Thickness, made of the same Paste; that at the End of some Months they open'd them, where they would find the Water partly evaporated, and the Salt of the *Borax* crystallized; that they took these Crystals out of that fat Mud, with which they were still mix'd or cover'd, and in that Condition they were brought to us from the *Indies*." Our Merchants import *Borax* also from *China*, where it costs little; which makes it probable, that this Kind of Salt is natural to that Country, or at least very easy to

make. These differant *Boraxes* are at present refined in *Holland*; but the Way of doing it is not a Secret only to the *Dutch*, for there is a private Gentleman in the *Fauxbourg St. Antoine*, who did refine it, and deliver it to the Merchants as fine and as pure as that of *Holland*. In this State of perfect Purification it is transparent like Rock-Crystal. The Use of *Borax* in Medicine is that of an incisive and aperient Salt, by Virtue of which it is effectual against Diseases which proceed from an Inpissation of the Humours, and Obstructions thence arising, acting at the same Time against the Acid, without exciting any Motion. The Dose is an entire Dram. It is thought by some to have a specific emmenagogue, and expulsive Virtue, which may probably be derived from the aforesaid incisive, deobstruent, and aperitive Qualities. However, its *Stimulus* does not seem strong enough to be depended upon for present Relief in a difficult Birth, unless it be join'd with some other Ingredients, that are of more Efficacy by their volatile *Stimulus*. For this Reason *Borax* is commonly given in Powder mixed with Saffron, Myrrh, Oil of Cinnamon, Castor, the volatile salt of Amber, and other Powders of known Efficacy, in promoting the Birth, and facilitating Delivery. Some advise a few Grains of it to be taken in a poach'd Egg, as a Provocative to Vener'y, especially to those whom poach'd Eggs alone have a good Effect upon; *Borax* calcin'd is reckon'd of specific Virtue in Fluxes of the Belly, or the *Semen*, because it is a Sort of styptic Earth. The Dose is from a Scruple to half a Dram, in Conserve of Roses, either alone, or with other suitable Ingredients, for Instance, the Bone of a Cuttlefish, or toasted Nutmeg. Outwardly it is apply'd, though but seldom,

to consume carnos and spongy Excrescencies, in fordid Ulcers; it is recommended also for the Itch, and in Cosmetics. The Usefulness of *Borax* in such Cases may reasonably be expected from its saline, incisive, and resolving Qualities, which cause it to be received into the *Unguentum Citreum*, which is recommended for making the Skin smooth, and free from Asperities. Its saponaceous, absterfivè Virtue, for the Purposes aforesaid, may perhaps more justly be expected from *Borax* in its crude State, as it is sold in *India*; tho' according to *Garcias*, it is seldom used by the *Indian* Physicians, unless for the Itch.

Calaminaris Lapis, Offic. Calaminar Stone. The Fossile *Cadmia* of *Agricola*, stony *Cadmia* of *Schroder*, *Lapis Calaminaris*, or Calamine of the Shops, is a fossil Substance, of a middle Consistence between Stone and Earth, of different Colours, such as a pale Colour inclining to white, yellowish, and a blackish red. This last is full of small ferruginous Globules, like Grains of Pepper, and mark'd with white Veins, and is found in great Quantities about *Bourges* near *Saumur*, in *Anjou*, in *France*, and in many Parts of *England*. The others are dug in *Germany*, near *Aix la Chapelle*; and all Kinds of it seem to partake of an Iron-Ore, because the greatest Part is attracted by the Load-stone. This Species of *Cadmia* was probably unknown to the ancient *Greeks*, or at least was not used by them in Physic, since it is not mention'd either by *Dioscorides*, or *Galen*. It is now prescribed, by some Physicians, to dry running Ulcers, to heal the excoriatèd Parts of Children, either in a fine Powder by itself, or mix'd with Ointments. The *Lapis Calaminaris* is much used in cooling, and drying Cerates; and is, in Powder, frequently sprinkled up-

on Sores and Ulcers, with a View of drying them, and disposing them to cicatrize. I have been told, that the Surgeons have lately observed, that *Lapis Calaminaris*, reduced to a very fine Powder, operates as an Escharotic; whereas in a more gross Powder it acts as a Dryer.

Calx, Offic. Lime. Quick Lime, by the *Greeks* called *κωλα*, or *τίτανος*, *δοξιστος*, or simply *δοξιστος*, is no more than a calcarious Stone, burn'd into a Calx of a white cineritious Colour, of an acrid and pungent Taste, and which, when it has not been too long exposèd to the Air, produces an Effervescence, Smoak, and a considerable Degree of Heat, when Water is poured upon it; but when it is penetrated by the moist and humid Parts of the Air, it ceases to produce an Effervescence, and becomes a Kind of Powder. Quick-Lime may be prepar'd not only of the Stone commonly called Lime Stone, but also of Marble, and other Stones of a close Contexture, and hard Nature. In some Parts of *France* it is prepar'd of a Sort of Flint, which is capable of being calcin'd. In *Holland*, and some other Countries, where Lime-stone is not to be found, they prepare it of the Sea Shells found on the Shore, which they calcine by the Assistance of a strong and violent Fire. But this Species is less proper, both for the Purposes of Architecture and Medicine, than that which is prepar'd of Stone. The *Americans*, according to *Labat*, prepare a Quicklime of Sub-marine Plants and Lithophytes; and in several Parts of *England*, where a proper Stone cannot be had, Lime is made of Chalk-stones calcin'd.

Quick lime is sometimes used by Surgeons as an Escharotic; but taken internally it is esteem'd a Poison. That Species, however, which is made of Shells calcin'd, is frequently

Quently given as a Medicine. Quick-lime is used in making some Sorts of Caustics. Lime-water, and the *Lixivium*, or Ley, lately so much celebrated for calculous Disorders; and 'tis very certain, that the Salts of Lime may exert very great Effects in the Body, if taken in such a Manner as not to do Injury by their Corrosiveness and Heat. Lime Water is esteem'd a Specific, for that Species of Scurvy, to which Sailors are so very subject; and Fluids-impregnated with the Salts of Lime, should seem to be very effectual for dissolving those Obstructions in the Vessels, which are form'd of earthy Particles.

Carbo fossilis, Lithanthrax, Offic. Pit-Coal, or Scotch-Coal. *Hoffman* informs us, that Coals, distill'd from a Retort by an open Fire, yield first a Phlegm, then a somewhat acrid sulphureous Spirit, then a subtil Oil, then a grossier Oil, which subsides to the Bottom of the Receiver; and, lastly, by a brisker Degree of Fire, a certain acidulated Salt, resembling that of Amber. In the Retort, there is left a light black Earth, which, upon the Application of Fire, emits neither Flame nor Smoke. I shall here give a brief, but accurate Description of the several Experiments made by *Hoffman*, in Order to investigate the Nature of these Principles. The Spirit yielded in Distillation, is at first White, but afterwards appears ting'd with a reddish-brown Colour; which Phenomenon may also be observed in the Spirits yielded by Woods, Tartar, Myrrh, and other Substances of a like Nature. Upon an Affusion of the Acid Spirit of Salt, a large Number of Bubbles immediately appear'd at the Bottom of the Vessel, which becoming gradually and successively more numerous, ascended to the Surface of the Liquor, but without any remarkable Perturbation of the Mixture. With Spirit of Nitre the Conflict was greater, and the

Liquor was render'd more turbid. Upon a sufficient Quantity of quick Lime being thrown into this Spirit, a strong volatile Spirit immediately afflicted the Nose in a forcible Manner. Upon an Affusion of Spirit of Nitre to this Mixture, a thick white Fume was forthwith emitted; which we always observe to happen, when we add Spirit of Nitre to volatile Salts or Spirits. The fetid Oil, intimately united and incorporated with Salt of Tartar, also diffus'd a Smell like that of volatile Salt. Upon Distillation, this Mixture yielded an alkaline, volatile, and oleous Spirit, which immediately became green with Syrup of Violets, as all Alcalis do; but, when mix'd with an Acid, rais'd a sudden Effervescence, and immediately assum'd a perfectly red Colour. The gross empyreumatic Oil of these Coals, obtain'd in the first Distillation, emitted a sulphurous Smell. When put into a Silver Spoon, to which a gentle Heat was apply'd, it immediately ting'd it of an obscure blackish Colour; a sure Proof, that a true mineral Sulphur is dissolved in it; for common Sulphur, dissolved in Oil of Turpentine, tinges Silver Vessels with the same Colour. The acid Salt, upon an Admixture of Oil of Tartar *per Deliquium*, assum'd a near Affinity to that obtain'd from Amber by Distillation. Spirit of *Sal Ammoniac* excited a large Number of very broad Bubbles, which collected themselves in the Bottom of the Glass: But immediately after, the Mixture, which was before limpid, assum'd a reddish Colour; and, upon the Affusion of an Acid, returned to its former Transparency. 'Tis rarely observ'd, that an Acid is thus ting'd by an Alkali. That I might, therefore, says our Author, trace the Cause of this Phenomenon more accurately, I mix'd dissolved volatile Salt of Amber, which I thought of a like Nature with the Salt of which we

now speak, with Spirit of *Sal Ammoniac*; by which Means, after some Conflict, the Mixture in a little Time assumed a beautiful brownish red Colour; and an excellent Medicine, of Vertues not inferior to succinated Spirit of Hartshorn, was produced. These are the principal Experiments I made, in order to investigate the Nature of fossile Coals; from which, I think, it is obvious, that no deleterious Principle, nothing offensive to the Mass of Blood, and the minutest Parts of the Body, in a Word, no noxious Mineral, no Quantity of Arsenic, are found in them. That a mineral Sulphur is not so fatal as is commonly believed, is sufficiently attested by those Men who prepare, fuse, and boil the Sulphur of Goslar who are found and vigorous, in comparison of other Metal-workers. Nor is there, in the *German Coal*, a very considerable Quantity of this Sulphur, otherwise it might be easily obtain'd dry, and in the Form of Flowers, by Sublimation; for these mineral Coals are porous and spongy Earth, richly and intimately impregnated with a bituminous and subterraneous Juice. Bitumen is their constituent Principle, without which they would neither emit Flame nor Smoke: But the Bitumen they contain, like all the other Species of Bitumens, of which Amber is one, consists of oleous, sulphureous, acid, and fine alkaline Parts, as is obvious from the chymical Analysis of Amber, Bitumen Judaicum, Naphtha, Petroleum, and all other resinous Bodies. So far then are these Principles from proving prejudicial to the vital Juices, that, by drying up the superfluous Humidity, they rather defend the Mass of Blood, and the Body, from Corruption and Putrefaction; for, according to *Galen*, all Bitumens are endowed with a balsamic Vertue. Besides, that bituminous Bodies set on fire, correct the bad State of the

Air, and dissipate its superfluous Humidity, are Points admitted by most modern Physicians; and the Antients used Sulphur and Asphaltus, in order to correct and purify the Air, when Plagues and contagious Diseases raged. Places in which the Atmosphere is very moist, and impregnated with aqueous Exhalations, which weakens its Force and Elasticity, are not wholesome; because, by that Means, Perspiration being obstructed, a Load of recrementitious and saline Sordes are retain'd in the Body, and communicate a depraved and scorbutic Intemperature to the Blood and Humours, from which terrible chronical Disorders arise. 'Tis therefore obvious, that the sulphureous Vapour of fossile Coals is of singular Service, in Countries where the State of the Air is moist and unactive; as is evident from the City of *Halle*: An immense Quantity of aqueous Exhalations, arising not only from the River *Sale*, diffused into many Branches, but, also from the Salt Works, whilst each Day at least ten thousand Pounds of Water are evaporated into the Atmosphere surrounding that City, must of Course beset the Town at Morning and Night, with Clouds, which every one must perceive to be prejudicial to Health, unless an Easterly or northerly Wind dispel them. And, in Times past, no City was more obnoxious to Scurvies, Consumptions, purple and malignant Fevers, than *Halle*; but since about twenty Years ago, they began to burn fossile Coals, for boiling the Salt, the Atmosphere is so purify'd, that these Diseases are scarce heard of in that City. In former Times the Physicians, who practised in it, complain'd that no Disease occur'd to them, which was not accompany'd with a scorbutic Taint. Numbers of young Men were cut off by Consumptions and Dysenteries; and petechial and spotted scorbutic Fevers raged

raged excessively; but now these Disorders happen rarely, and then only a few are affected with them. But I am well apprized, that it is by some objected, that the Exhalations of fossile Coal, are rather pernicious than advantageous to Health; because they prey upon Metals, especially the Iron and Lead of Windows, which they consume; and because in Gardens which are near them, and thick set, they render the Trees and Shrubs barren and sapless. 'Tis also objected, that in *England*, and especially *London*, a Consumption is produc'd, peculiar to that Country, by a preternatural Dryness of the Vesicles of the Lungs in Consequence of this Smoak, as also, that its Smell is fetid, and highly disagreeable. But to all these Objections we answer, that tho' the Smoak arising from the Mineral Sulphur, and from Vinegar, are possess'd of a powerful Virtue, by which they consume the lighter and more porous Metals, Iron and Lead, they are not for that Reason, less proper for purifying the Air, when a Plague rages, or dissipating its superfluous Moisture, so prejudicial to Health. Besides that this Smoak does not in the least injure the Health of those People who inhabit the Houses expos'd to it, and in which the Leads of the Windows are corroded, is a Fact attested by daily Experience, since few of them labour under any Disorders of the Breast. That this Smoak, however, may prove prejudicial, when thick and dense, is a Fact of which I am firmly persuaded; for as a large Quantity of Exhalations from a Balsamic Gum, which is friendly to Nature, for Instance, from Mastick, Benjamin, or *Peruvian* Balsam, is ungrateful; so 'tis not to be doubted, but the dense Vapour of Bitumen, which is not very grateful, may create Disorders;

which, however, seems to be owing not so much to its Nature, as to the Excess of its Quantity. 'Tis not therefore, to be wonder'd at, if in *London*, where a gross State of the Air, Gluttony, and excessive Drinking, especially of spirituous Liquors, induce a morbid State of the Humours, an excessive Quantity of Smoak, arising from fossile Coals, should prove prejudicial, and produce a Dryness of the Lungs. As to that Objection of the Smoak being fetid, disagreeable, hurtful to the Nerves and membranous Parts, and prejudicial to those who labour under a Weakness of the Nerves and Head, we answer, that tho' the Smells of fetid Substances are not always grateful to the Delicate, yet they are not, for that Reason, prejudicial to Health; as is obvious in the Spirits of Soot, Worms, and Hartshorn, which are all highly fetid. But how much these Spirits contribute to repair the Strength, and to preserve and purge the Mass of Blood and Humours, is known to almost every one concern'd in Physic. It must also be observed, that the Smell, even of Perfumes, is ungrateful to many; as we observe in Women who have weak Nerves, and who not only bear Fetids more chearfully, but receive a Kind of Relief from them.

Chalcedonius, Offic. The Chalcedony. This is a precious Stone. As to its Medicinal Uses it is by some thought serviceable against all Disorders arising from black Bile, such as Sadness, Melancholy, and the unaccountable Dread of Demons and Spirits. Those brought from the *East Indies*, which are moderately pellucid, and variegated with whitish milky Streaks, if hung about the Breast, are said to generate Abundance of Milk. Some Authors are so ridiculously superstitious and whimsical, as to promise Victory to the happy Combatant who wears

wears the Chalcedony Stone about him. Its true and genuine medicinal Virtues seem to consist in its absorbent Quality, when it is reduced to a fine Powder, and exhibited like the other earthy and absorbent Powders. But because the Apothecaries have other Substances of the same Virtues, and, at the same Time, far more easily prepar'd, it is rarely prescrib'd by the Moderns.

Chalcitis, Offic. As the *Misy*, *Sory*, *Chalcites*, and *Melanteria*, are generally found in the same Mines, Authors usually treat of them together, whose Examples I shall follow. The *χαλκίτις* of the *Greeks* takes its Name from *χαλκός*, *Brass*, and is commonly described to be a metal-line Recrement, of the Colour of *Brass*, diversify'd with oblong, shining Veins, and produced in the same Ores, which give Birth to the *Sory* and *Misy*. Betwixt these two Substances it holds a middle Rank, not only with Respect to its Bed, but also with Respect to its Consistence; for, according to some, the *Sory* is thinner, and the *Misy* thicker; and, according to others, the *Sory* is thicker, and the *Misy* thinner than the *Chalcites*. According to *Galen*, the undermost Bed is of a stony Texture, and consists of *Sory*: Over this lies the second Bed, which is *Chalcitis*, and resembles an Efflorescence; and the uppermost Bed is that of the *Misy*, which resembles *Verdigrise*; but in Process of Time, the *Chalcitis* is converted into *Misy*, and the *Sory* into *Chalcitis*. According to *Pliny*, "That Stone is called *Chalcitis*, from which the *Brass* itself is obtain'd. It differs from the *Cadmia* in this, that the former is cut from Rocks above the Ground; whereas the latter is only obtain'd from such as lie conceal'd under it. The *Chalcitis* also becomes immediately

" friable, and assumes a soft Texture, in Appearance like that of concreted Down. There is also another Distinction between the *Cadmia* and *Chalcitis*, which is, that the latter contains three Kinds of Substances, *Brass*, *Misy*, and *Sory*; for it has oblong Veins of *Brass*. That is thought best, whose Colour resembles that of *Honey*, has slender Veins, is friable, and not of a stony Nature. That which is recent is also accounted best, because when old, it becomes *Sory*." And according to *Dioscorides*, "That Species of *Chalcitis* is best which resembles *Brass*, is friable, not stony, recent, and variegated with oblong and shining Veins. This Substance is of an absterfive heating Nature, and cicatrizes Ulcers. It removes the tough and viscid Matter which sticks in the Eyes, and their Corners. In a Word, It is among the Number of the gently corroding Medicines. It is an effectual Medicine against an *Erysipelas* and *Herpes*. In Conjunction with the Juice of Leeks, it stops Hæmorrhages from the Womb and Nostrils. The Powder of it cures Disorders of the Gums, spreading Ulcers, and Tumors of the Tongue. When calcin'd and triturated with *Honey*, it proves an excellent Medicine for Disorders of the Eyes. It removes and destroys Callosities and Roughness of the Eye-lids. It cures Fistulas of the Eyes, when put into them, by way of Collyrium. Of the *Chalcitis* is prepared a Medicine distinguished by the Epithet *Psoricon*. For this Purpose we must take two Parts of the *Chalcitis*, one of the *Cadmia*, and triturate the whole in Vinegar. But this Medicine must be buried in Dung, in an earthen Vessel, for forty Days, during the Appearance of

" the

the Dog-Star, that it may become more acrid, which the *Chalcitis* itself also does by the same Method. Others prepare the same Medicine, by trituring equal Portions of these two Substances in Wine. The *Chalcitis* is to be calcin'd in a new earthen Vessel placed over live Coals. It is customary to calcine the moiſter Kinds of the *Chalcitis* till it does not riſe in Bubbles, and is become perfectly dry; but the other Kinds may be taken off the Fire when they have aſſum'd a florid Colour, reſembling that of Blood or Minium. The Sordes appearing on the Surface muſt be blown off; or it may be calcin'd upon Coals, blowing them all the Time, till it aſſumes a palish Colour; or putting live Coals under the Vessel, it is to be ſtirr'd about till it flames, and changes its Colour." 'Tis obvious, that the Antients reckon'd the *Chalcitis* among the abſtergent, drying, acrid, caustic, or eſcharotic Medicines. The Variety of Compoſitions, in which, according to *Scribonius Largus*, they uſed this Ingredient, is a ſufficient Proof of this. That it was applied to the ſame Purpoſes by their Farriers, we may find in the twenty ſixth Chapter of the ſecond Book of *Vegetius*. *Foreſtus* recommends the calcin'd *Chalcitis* for drying Ulcers. At preſent torrefy'd *Chalcitis* is an Ingredient in the *Theriaca Andromachi*, and in the *Emplaſtrum Diachalciteos Galeni*, which is alſo called *Diapalmā*. But, becauſe the *Chalcitis* is not generally known, the Moderns for the moſt Part uſe white Vitriol, either calcin'd or crude, or the *Vitriolum martis* in its Stead; which laſt *Schulzius*, in his *Blancardi Lexicon Renovatum* prefers, for making the *Theriaca*. Whether the *Chalcitis* is a proper Ingredient in the *Theriaca*, is much diſputed; but it

ſhould ſeem that, it is not neceſſary in that Compoſition, as will appear from conſidering what Kind of Subſtance it properly is. *Matthiolus* ſeems to have been the firſt who hinted at its true Origin, in the following Words: "It is obvious, ſays he, to every one, from common Experience, that all Vitriol of every Kind, in Proceſs of Time, degenerates into *Chalcitis*." For it is a Species of metallic Recrement, called *Atramentum Rubrum*, generated of the *Pyrites* ſoften'd in Water, which has Iron either pure, or mix'd with Braſs, aſſociated with it, and which is continually more and more diſſolved and divided till it appears friable. This Recrement conſiſts of moiſt and aqueous Particles leſs temperate, and with a ſmaller Portion of Sulphur, or ſulphureous Acid, than Vitriol. In Conſiſtence and Colour it differs from *Sory* and *Miſſy*, is of an acrid, acid, and aſtringent Taſte, of a penetrating nauſeouſ Smell, and diffuſes an ungrateful Odour. From it are often obtain'd in the Smelting Houſes, Braſs, *Cadmia*, *Pompholyx*, *Spodium*, and *Diphryges*. That Species of *Chalcitis* is by ſome eſteem'd the moſt genuine, which conſiſts of beautiful Purple colour'd Pieces: But for Uſe, 'tis no Matter of what Colour it is; for what is imported into France for Sale from St. *Chriſtopher's*, is, according to *Pomet*, of a greeniſh Colour; like that of imperfectly calcin'd Vitriol. According to the learned *Henckelius*, we ought rather to enquire, after the Elixivation of the Vitriol, of what Nature it is, whether it partakes of Iron or Copper, that we may be the better able to judge, for what Medicinal Purpoſes it is moſt proper. Hence 'tis obvious, that they are in the right, who call *Chalcitis* the *Colcothar*, or *Caput Mortuum* of Vitriol; as alſo thoſe who claſs it

it among the vitriolic Minerals, or crude and impure Vitriols. Hence the Reason is also obvious, why it is by some accounted a Species of Vitriol, and why *Boerhaave* calls it *Vitriolum rubrum*, because for Instance, it is a Composition of the Acid of Sulphur and Iron, in which there is perhaps, a small Admixture of Brass. But it is more properly call'd the *Colcothar* of Vitriol than entire and perfect Vitriol, because it wants a Crystalline Form.

The choicest *Misy* comes from *Cyprus*, resembles Gold, is of a hard Substance, and when broken, glitters like Gold, and shines with a Star-like Splendor. It is calcin'd in the same Manner, and has the same Virtues, as *Chalcitis*, only *Misy* produces no *Psoricon*: As to their Qualities, *Misy* and *Chalcitis* differ only with respect to Intenseness and Remissness. The *Egyptian Misy* is prefer'd for its Strength, but is far inferior to the *Cyprian* in its ophthalmic Virtues. *Geoffroy* says it seems to be nothing but an Efflorescence of *Chalcitis*.

Some have mistaken the *Sory* for *Melanteria*; but they are of different Kinds, tho' not much unlike: But *Sory* is the stronger scented, and creates a *Nausea*. It is produc'd in *Egypt*, and some other Countries, as *Africa*, *Spain*, and *Cyprus*; but the *Sory* which bears the highest Price is what comes from *Egypt*, and, when broken, appears of a blacker Colour, is full of Perforations, of a fattish Substance, astringent, of a strong Smell and Taste, and subverts the Stomach. That *Sory* which does not sparkle like *Misy* when it is broken in Pieces, is reckon'd of another Kind, and of little Value. It is calcin'd, and has the same Virtues, as the *Misy* and *Chalcitis*. Put into a hollow Tooth, it eases the Pain thereof; and it fastens loose Teeth. Infused

in Wine, it helps the *Sciatica*; and clears the Skin of Pimples, if rub'd thereon with Water. It is an Ingredient also in Medicines which make the Hair black. Generally speaking, this and almost all other Drugs are stronger before they are calcin'd than afterwards, except Salt, Lees of Wine, Nitre, Quick-Lime, and the like, which are of little Efficacy when crude, but have their Virtues much improv'd by Calcination. *Geoffroy* says the *Sory* of the *Greeks* is a fossile Substance, thicker and more compact than *Chalcitis*, which emits Sparks by Attrition, and is of a spongy Texture, black colour'd, astringent, nauseous Taste, and of a strong hurtful Smell.

This Description agrees very well with a Substance which the *Turkish* Women make Use of to take off Hairs from their Bodies, call'd by them *Rusma*, which is describ'd by *Bellonius* to be a Fossil, almost like Excrement in Appearance, but lighter, and of a black burnt Colour, like Pitch, found in the Mines of *Gallo-Græcia*.

The *Melanteria* is sometimes found in the Entrance of Copper Mines, where it concretes like Salt. Another Sort, which has an earthy Quality, is gathered from the uppermost Surface of these Mines. There is also a fossile Kind found in *Cilicia*, and in some other Countries. The best *Melanteria* is of the Colour of Sulphur, smooth, equable, pure, and which touch'd with Water, immediately turns black. It has the same caustic Quality as *Misy*.

All these fossile Substances are now rarely found in Apothecaries Shops, being to be had nowhere else but in *Cyprus*, *Asia minor*, or *Egypt*. They are caustic, and burn to an *Eschar*, and are, in some Degree, astringent. *Chalcitis* was used in the *Theriaca* in *Andromachus's* Time, but, as it can seldom

feldom now be had; *Colcothar*, or Vitriol calcin'd to a Redness, is substituted for it.

Chalybs. Steel. See *Mars*.

Chia Terra, Offic. Earth of Chios. This Sort of Earth is to be chose whitish, inclining to an Ash Colour, and like the Earth of *Samos*. It is crusty and white, but made up in Masses of different Forms, and has the same Virtues as the *Samian* Earth. It clears the Skin of Wrinkles, and is good for Ambuitions. *Terra Samia*, or *Cimolia alba*, may be substituted in its stead.

Chrysocollo. The same as *Borax*, which see.

Chrysolithus, Offic. The Chrysolite. This is a green diaphanous Gem, of a glittering Splendor like Gold. It is found in *India*, and other Countries; and is superstitiously said to be endued with the Virtue of stopping Hæmorrhages, and of mitigating Bile, Anger, and Phrenesies.

Chrysopasus & *Topasius*, Offic. The Topaz. It is a diaphanous and pellucid Stone, of the Colour of Gold, and is supposed to be of a solar Nature from its Signature; for which Reason it is believed to strengthen the Mind against nocturnal Fears, to diminish Melancholy, to prevent troublesome Dreams, and to work other such good Effects; but these Virtues are entirely superstitious.

Cimolia alba, Offic. Tobacco-Pipe-Clay. This was very famous among the Antients. It acquir'd its Name from *Cimolus*, an Island near *Crete*, now call'd *Sicandre*, where it was found in great Plenty. *Tournefort* describes the *Cimolia alba* as a white, heavy, insipid Chalk, abounding with small Grains of Sand, which he thinks the same as that got about *Paris*, except that the *Cimolia* is fattish, and saponaceous, whence it is called *Terra Japanaria*. The Inhabitants

he says, make Use of no other Soap for washing their Linen than the *Cimolia*. I apprehend the *Cimolia alba* is different from the common Tobacco-Pipe-Clay; but *Dale* informs us, that in *Cornwall* a Sort of Clay is found, which he calls *Steatites*, and which is used as a Soap. In the Shops this Earth, with the Mark of a Seal upon it, is called *Terra Sigillata alba*. It is also sometimes sold for the *Terra Samia*. *Dale* farther informs us, that the *Cimolia alba*, which he seems to think the same as Tobacco-Pipe-Clay, is drying and astringent, either apply'd externally, or taken inwardly; and further that it is an excellent Medicine either in continual or intermittent Fevers; and that it was the grand Secret of *Sir Theodore Mayerne*, in curing these Disorders.

Cimolia purpurascens, Offic. Fuller's Earth. This is seldom or never used internally; but applied, as a Topic, it is drying and astringent.

Cinnabaris nativa, Offic. Native Cinnabar. This Cinnabar is a Fossil, metallic, heavy Substance, not very hard, found sometimes pure, and sometimes mix'd with Stones. Of the pure Cinnabar there are several Kinds; one of a purple Colour, inclining to red, but which, by grinding, turns to a very beautiful Red; another of a blackish or liver Colour, resembling the *Lapis Hæmatitis*; and a third of a yellowish Colour, which is commonly so rich in Quick-silver, that, when heated in the least Degree, the Metal drops spontaneously from it. The other Kind of native Cinnabar is found in a fossile Stone, form'd of *Laminae*, of an Ash Colour. It has been likewise found in a white metalline Stone, and sometimes in Form of a Gold or Silver *Pyrites*, such as was dug up some Years ago in several Places of *Normandy*. Native Cinnabar is found in *Hungary*, *Bohemia*, *Italy*, *Spain*, and *France*.

France, and every one knows of what Parts it is compos'd. Quick-silver is obtain'd from it, by distilling it with Quick-lime, or Filings of Iron; and Sulphur may likewise be had, in a small Quantity, by boiling it in strong *Lixivia*, and then pouring distill'd Vinegar into the Decoction, the Quick-silver being first separated. The internal Use of it is recommended by some Physicians in the Epilepsy, Vertigo, Madneſs, and all spasmodic Affections. In these Cases they choose that of *Hungary* or *Carinthia*, which is of a sparkling red Colour, and free from all heterogeneous Particles; and reject the dark or yellowish Kind, as being more impure. Sometimes, however, native Cinnabar, by Means of some vitriolic, or even arsenical Particles associated with it, happens to excite Nauseas, Vomiting, Anxieties, and Heartburns, which I have myself more than once, says *Geoffroy*, been a Witness to, even after the Cinnabar had been purged by frequent Wastings. Every Pound of good Cinnabar, yields fourteen Ounces of Quick-silver.

Cos, Offic. The Whetstone. *Dioscorides* informs us, that the Grit which is worn off the Whetstone, by sharpening Iron, causes Hair to grow upon the Parts affected with an *Alopecia*; that it restrains the Growth of the Breasts in Virgins; and that, drank in Vinegar, it consumes the Spleen, and is good for an Epilepsy. There are three different Sorts of Whetstones, the Hone, the Gritstone, and the black Whetstone. It is not easy to determine which is meant by *Dioscorides*.

Creta, Offic. Chalk. This is call'd by the *Greeks* *Κρητική γη*, Cretan Earth, because the best Sort was brought from *Crète*, now *Candia*. *Kentman* takes Notice of fifteen different Sorts of Chalk. *Geoffroy* describes Chalk, a dense, brittle, earthy

Substance, which readily stains the Fingers, and sticks to the Tongue, without any Astringency. Many Kinds of Earth come under the Denomination of Chalk. Chalk is now found in many Countries besides *Crète*. It raises an Effervescence with acid Liquors, and is therefore, deservedly looked upon as an alkaline, or absorbent Earth. It is us'd with Success to allay the too great Acidity of the Juices of the Stomach, particularly in the Disease commonly known by the Name of the Heart-burn; and also in Coughs, that arise from a sharp Phlegm. It is likewise serviceable in Hemorrhages, and is said to kill Worms. In a Word, the Property of all alkaline Earths, is not only to absorb Acids, but to allay the Acrimony of the Fluids, and especially to restrain the violent Motion of the Bile, by detaining the Salts and Sulphurs thereof in their fixed Parts. White Chalk is given alone, from fourteen Grains to a Dram. Powder'd Chalk is also given with Milk, to prevent its turning Acid in the Stomach; and externally, it is commended for drying Wounds, Ulcers, and Fissures in the Nipples. Chalk, when calcin'd, becomes a Lime, and differs extremely in Virtues from Chalk uncalcin'd. Chalk in large Quantities, put into Springs or Wells of hard Water, is said to render it soft. *Dr. Stare*, from Experience affirms, that Chalk absorbs Acids sooner, and more powerfully, than Crabs Eyes, calcin'd Hartshorn, or Coral; and he therefore judges it to be a better Remedy than either of these for destroying Acids in the Stomach. It is externally apply'd to running Pustules, Achors, and Excoriations, and is farther said to be of Service, when apply'd to an *Erysipelas*, or to Parts affected with gouty Pains. Chalk, however, if taken in considerable Quantities, and without proper Cathartics

thartics to carry it through the intestinal Tube, when it has exerted the Effects intended, is known by Experience, to be productive of great Mischiefs, by plaistering as it were the Intestines, obstructing the Lacteals, and the Orifices of the intestinal Glands, and thereby causing Cachexies, Indigestions, and various Disorders.

Creta Selinusia, Offic. Earth of *Selinusia*. This Earth is in most Esteem, when it is resplendant, white, friable, and readily diluted with a Fluid. It is drying and astringent, and is recommended as a good Topic for Ulcers.

Crystallus, Offic. Crystal. *Frederic Hoffman*, in many Parts of his Works, recommends Crystal as a Medicine, under the Name of *Crystallus montana*. *Schroder* informs us, that Chrysal is astringent, and good in a Dysentery, Diarrhæa, the Celiac Passion, Cholera, and uterine Fluxes, that it increases Milk, wears away the Stone in the urinary Passages, and is beneficial in the Gout. He further says, from *Boëtius de Boodt*, that two Scruples, or a Dram of this, exhibited in Oil of sweet Almonds, is good for those who have taken Mercury. *Schroder* takes Notice of the Salt, Magistery, Oil, Elixir, and Essence of Crystal: But I believe these are never either made or used. Rock Crystal is a soft transparent Gem, resembling Ice, and its Figure is that of an hexagonal Pillar, pointed at both Extremities; or it may be said to be compounded of two Pyramids, with such a Pillar between them. A second Kind is found in *Ireland*, and in some Parts of *France*, especially about *Troyes* in *Champagne*, which seems to be made up of Crystalline Plates, and fissile in the Direction of all its plain Surfaces, and, when reduc'd to Powder, it still retains a rhomboidal Figure, so that even the finest Powder, view'd

thro' a Microscope, shews a Congeries of very small rhomboidal Solids. Another Property of this Crystal is, that all Objects, seen thro' it, appear double; which arises from a double Refraction of the Rays of Light. A third Species of Crystal is that mention'd by Dr. *Lister*, which is very smooth, pellucid, and glittering, coming near to a Diamond. Its Figure is spherical, oval, depressed, and sometimes representing an Hemisphere or Hemispheroid, and in others roundish and irregular. It is very hard, and has an exquisite natural Polish, and is dug up in Pieces of different Sizes in several Places of *England*.

Diphryges, Offic. Scurf. It is a Sort of Metallic Recrement, which subsides upon a particular Treatment of melting Brass with Water. At present the Shops are unacquainted with it. It is of a mixed Quality, containing in itself something moderately astringent, and moderately acrimonious; for which Reason it is a very good Remedy for all stubborn Ulcers.

Eretria terra, Offic. Eretrian Earth. There are two Sorts of *Terra Eretria*; the one white; the other Ash-colour'd. What is most esteem'd, approaches to an Ash colour, and is very soft, and drawn over Copper-Plates, leaves a Line of a Violet Colour. According to *Dioscorides*, it has an astringent, and refrigerating, with somewhat of a mollifying Virtue, incarnates, and conglutinates recent Wounds.

Ferrum. Iron. See *Mars*.

Gagates, & *Succinum nigrum*, Offic. Jet. It is a Kind of black, stony, crusty Earth, so full of *Bitumen*, that it smells strongly of it, and being kindled, flames almost like Pitch, and emits a very black Smoke. It differs from the *Terra Ampelitis*, in that this latter sends forth no Flame, unless excited by Bellows, and

and has no bituminous Smell; whereas the *Gagates*, held to the Fire, catches Flame, and emits a Smell like *Bitumen*. It is mollifying and discutient, and is supposed to cure the Colic, and other Distempers. It is of great Efficacy in Hysterics, and the Epilepsy; and is also a Diuretic. The Oil thereof is good for the Palsy. *Tournefort* commends it in hysteric, epileptic, hypochondriac, and paralytic Disorders; the Dose is from six Drops to twelve. *Wormius* makes the *Gagates* only a harder Species of *Ampelites*, and says, that, when it is polish'd, it is called by *Pliny*, the *Gumma Samothracica*; by *Nicander*, *Lapis Thracius*, and, by some, *Lapis Obsidianus*. Though *Agricola*, says *Aldrovandus*, supposes the *Lapis Obsidianus* to be a Species of *Gagates*, and *Lapis Thracius*, I believe it to be a Substance very different from both. *Dioscorides* says, that, used in Suffumigation, it cures the Fit of an Epilepsy; and revives the Patient under hysteric Disorders; and that the Fume thereof drives away Serpents: It is an Ingredient in antiarthritic Medicines, and in *Acopa*. It is produced, he says, at the Mouth of a River in *Cilicia*, near a City called *Plagiopolis*; and the Place, or River, where it is found is called *Gagas*.

Granatus, Offic. The Granate. This is a pellucid Gem, of a yellowish red Colour, almost like that of native *Cinnabar*; it is said, if prepared, and taken internally, to be drying and strengthening; to cure Palpitations of the Heart, and to resist Melancholy and Poison; and to stop Hæmorrhages. It is also believ'd by some, to have the same Effects, if suspended about the Neck.

Gypsum, Offic. Tarras, Plaster of Paris. Authors dispute about the *Gypsum*, some will have it to be the Calx of *Alabaster*, others that of Alum of *Scajola*, others make it the

Calx of *Muscovy* Glafs; and some that of the Selenite Stone: But our *Gypsum* is a Lime made of some whitish Stones, and opaque Bits of Talk, slightly burnt till they sparkle. The best, according to *Dr. Merret*, is in *Derbyshire*, and used in Flooring and Cieling of Houses. The learned *Dr. Lister*, in his *Journey to Paris*, says, there are Quarries of this *Gypsum* at *Monmartre*, and that they burn it in an open Fire, the hardest Part requiring no more than three or four Hours burning. He saw also a Quarry of it at *Clifford-Moor* in *Yorkshire*, where it is called *Hall-Plaster*. It is of a drying Quality, stops Bleeding, and absorbs as an Alkali the Acrimony which falls from the Gums in the Scurvy.

Halcyonium, *Spuma maris*, Offic. The Froth, or Foam of the Sea. This is a bituminous or oleous Substance, found floating on the Sea. It is much controverted, whether this is the Excrement, Sperm, or Milk, of some Animal, or a Kind of *Zoophyte*; or a Juice of some Sea Plant; or something of a bituminous Mineral Exudation from the Bottom of the Sea, converted into a Foam by the Agitation of the Waves.

Heliotropium, Offic. The Heliotrope. This is an opaque Gem, of a green Colour, mark'd with bloody Spots or Veins. It is said to resist Poison, and to stop Hæmorrhages.

Hyacinthus, Offic. The Hyacinth. This is so called, from its Resemblance to the Plant of that Name, in its yellowish Colour, of which there being several Degrees, the different Kinds of it are taken from thence: Some are of the Colour of red Lead, or bilious Blood, some of Saffron, some of yellow Amber, which are the least esteem'd. Hyacinths are distinguished into Oriental, which are brought from the *East-Indies*; and Occidental, which comes from *Silesia*, *Bohemia*, *Auvergne* in

France, and other Places: These Hyacinths seem to be different from that mention'd by the Antients, especially by *Pliny*, which was of a shining Violet Colour, like the *A-methyst*, tho' not so strong. Many superstitious Virtues have been ascribed to this Stone. They said it was of a cold Nature; that it strengthens the Heart, is gently astringent, and procures Sleep.

Jaspis, Offic. The Jasper. It is an opaque Gem, of a green, and sometimes a Blood Colour. It is found in the *East Indies*, and is said to stop all Sorts of *Hæmorrhages*, and to exhilarate the Spirits.

Judaicus Lapis, Offic. The Jew's Stone. This is an oblong, roundish Stone, of the Figure of an Olive, marked with Streaks and Furrows, running from the *Base* to the *Apex*, according to its Length, at equal Distances from each other. It is of a whitish or Ash Colour, and shining within. It parts obliquely into thin *Laminae*, and is given in Powder, to the Quantity of a Dram, in any proper Vehicle. It was called *Lapis Judaicus*, or *Syriacus*, from the Countries where it is found. By others it is named *Eurotus*, as being of a diuretic Virtue. This last Virtue *Geoffroy* very much questions; but says it is plain from Experience, that this Stone, the *Lapis Lyncis*, Crab's Eyes, and several other Things, said to have a Power of dissolving the Stone, are really diuretic. But it cannot be concluded, that, because oftentimes Gravel comes away with the Urine, therefore they have any lithontriptic Quality; for the fixed earthy Parts of these Stones, being mixed and incorporated with the Salts of the Fluids in the Body, become thereby more fixed, and more unfit to pass off thro' the Pores of the Skin, but find their Way more easily thro' the Strainers of the Kidneys. Therefore the Se-

cretion, by insensible Perspiration, being lessened, they are excreted in greater Quantities by Urine; and thereby whatever *Saburra* they find there, they wash away; and hence the Urine becomes turbid, and is sometimes mixed with Gravel, some Particles of which may be of a considerable Size, when the Passage is wide enough to transmit them. In this Manner the diuretic Quality of these Stones may be accounted for; but neither Experience nor Reason can give any Ground for attributing to them a lithontriptic Quality.

Lapis Armenus, Offic. The Armenian Stone. This Stone is opaque, with green, blue, or blackish Spots, smooth, and marked like the Azure Stone, with Gold coloured Specks, and friable. There is indeed, but very little Difference between the two Stones, they being often found in the same Glebe, and used indifferently for each other, as having the same Virtues; only the *Armenian* Stone is more strongly purgative. It is given from six Grains to a Scruple; and externally used, it is detergent, with some Degree of Acrimony and Stypticity. It is very seldom used in Physic; but the Painters employ it in making a beautiful blue Colour, with a greenish Cast.

Lapis Asiæ, Offic. *Sarcophagus*, sive *Assius Lapis*, De Laet. The Assian Stone. *Galen* informs us, that this Stone is so called from *Assos*, a City of *Troas* in the lesser *Asia*. It is of a tophous, soft, friable, and loose Substance; something grows upon it like very fine Meal, such as we see sticking upon the Walls of Mills; they call it the Flower of the *Assian* Rock. It is of subtle Parts, and consumes Flesh that is too soft and fluid, by Colliquation, without Mordacity. The Stone on which it grows, has the same Virtue, but weaker; for the Flower is not only colligative, digestive, and preservative

vative like Salt, but performs all this without any remarkably corrosive Quality. *Dioscorides* informs us, both the Stone and the Flower have an astringent, and gently colliquative Virtue, and being mixed with Resin of Turpentine or Tar, disscuss Tubercles; but the Flower is esteem'd most effectual, and is, indeed, when dry'd, an extraordinary Remedy for inveterate Ulcers, which are difficult to be cicatrized, and represses carnosus Excrescencies. Mixed with Honey, it absterges foul and virulent Ulcers; it deterges also, and incarns Ulcers which are hollow; and mixed with Cerate, restrains the spreading Kind. It is made into a Cataplasm with Bean-Meal for the Gout; and for splenetic Disorders, with Vinegar and Quick-lime. The Flower made into an Eclegma with Honey, is good in a Phthisis. Vessels are made of the Stone, in which gouty Persons put their Feet when they bathe, and find Relief thereby. Coffins are made of the same, for the speedy Consumption of dead Bodies; and Persons of a very fleshy and gross Habit are extenuated, by sprinkling the Flower instead of Nitre, in their Baths.

Lapis Bononiensis, Phosphorus Bononiensis, Spongia Solis, Lapis Lucidus, Mont. Exot. Bononian Phosphorus, Light Carrier. This is a small, grey, soft, glossy, fibrous, sulphureous Stone, about the Bigness of a large Walnut; when broken, having a Kind of Crystal or sparry Talk within; found in the Neighbourhood of *Bologna* or *Bononia*, in *Italy*, and when duly prepared, making a Species of *Phosphorus*. It is esteem'd caustic, escharotic, and emetic.

Lapis Bufonites, Offic. The Toad Stone. Some affirm, that these Stones are found in the Heads of old Toads which have lived in dry Places; and that the Stone is far more valuable,

when taken from the Toad immediately killed, than when it has been dead for a great while. The common People affirm, that an old Toad, if laid upon a red Cloath, will vomit up this Stone. Others for obtaining the Stone, order a Toad to be exposed to the Heat of the Sun, till it be parched with Thirst; upon which they maintain it will vomit its Stone, as too great a Burden to its Head. Others, in Order to procure the Stone, order a very large live Toad to be put into an earthen Vessel full of small Holes, and the Vessel, when close stopp'd, is to be buried among a large Collection of Ants, for the Space of a Month; for then they affirm, that the Flesh of the Toad being destroy'd by the Ants, nothing remains but the Bones, and the Stone which was lodged in the Head. I cannot forbear looking upon these Accounts as so many Fables, too palpable and glaring to deserve our Attention, much less our Assent. Our learned Countryman, *Mr. Brown*, in his *Vulgar Errors*, thinks, that People have some Reason to seek for such Stones in the Heads of Toads, because stony Concretions are often formed in the Head of many other Animals, but more especially Fishes and Snails; but he doubts whether such a Stone is really found in the Head of the Toad; and, if it is really there, he thinks it is the Cranium indurated or petrify'd. Others have asserted, that this Stone was produced from the viscid Spume deposited upon the Head of a large Toad, by a Collection of Toads lodged in a Cave in the Winter Season. Hence *Christophorus Salveldensis* informs us, that in *France* and *Spain*, this Stone is only produced by a certain Species of horned Toad, called *Borax*, and mark'd with Saffron-colour'd Spots, and blackish livid Streaks. *Lanxonius*,

nus, from *Alb. Seba*, informs us, that the Origin of the Toad-Stone is very uncertain, and involved in a Kind of impenetrable Obscurity; since, notwithstanding the large Number of Authors who have wrote concerning them, and endeavour'd by Examination to discover their Natures, not one has hitherto dar'd to assert, that he has, with his own Hands, extracted a Stone of this Kind from the Head of a Toad, or even pretended to shew one obtain'd in that Manner; for *Vallisneri*, after all the Pains he could take, could by no Means obtain any Stone from the Toad; from which Circumstance, he thinks, he has Reason to conclude, that this Stone being found in the Toad is a Story, which, like some other Pieces of Imposture, has met with a kindly Welcome from the Credulity of Mankind. *Merret*, affirms, that the Stones called Toad-Stones, and accounted Gems, are only certain Teeth called the Grinders, in the *Lupus Marinus*, or Sea-Wolf. *Schroder*, as *Dale*, informs us, recommends the Toad-Stone, as a most valuable Medicine against the Plague, and all Kinds of Poisons. Some affirm, that the *Bufonites*, or Toad-Stone, carried about any Person, preserves him against all Kinds of Poison, and changes its Colour upon coming near a poison'd Cup. But, as these Things are not found to hold in Fact, I think it enough just to have mention'd them; only I must observe with *Boecler*, that the *Bufonites*, in Consequence of its being an alkaline Substance, may absorb Acids, and contribute to the Cure of Fluxes.

Lapis Galactites, Offic. Milk-Stone. It grows out of a Lime-stone, which it very much resembles too in other Respects. It is of an Ash Colour, and, being rub'd on a Whetstone, yields a milky and sweet Juice; whence it takes its

Name. It increales almost every Year, so as at last to be as big as a Child's Head. It is somewhat heating and absterfive; whence it is proper to anoint the Eyes with it in Defluxions and Ulcers. After bruising it in Water, it ought to be repositied in a leaden Box, because of the glutinous Quality which it retains. Triturated, and drank in Water, or sweet Wine, after Bathing, it generates Plenty of Milk in the Breasts of Women.

Lapis Geodes, Matth. *Geodes*, Offic. The bastard Eagle Stone. This Stone is of an astringent and drying Quality, deterges such Things as darken the Sight, and mitigates Inflammations of the Breasts and Testes, being rub'd on the affected Parts with Water.

Lapis Hamatites, Offic. The Blood Stone. *Lapis Hamatites*, *Nit. aquarum*, of the Greeks, *Sedenegi*, and *Sadanegi* of the Arabians, is a ferrugineous, hard, glebous, ponderous, metallic Substance, of a dark red or yellowish Colour, and sometimes blackish, or of the Colour of Iron, and of an earthy astringent Taste; being broken, it shews fine, long, sharp Fibres, like those of Wood. It was called *Hamatites*, in Greek, from its Colour; or because it is endued with the Virtue of stopping Blood. *Pliny* distinguishes five Kinds of Blood-stone, according to the Countries where they are found, and their differing Colour and Hardness. Others divide them according to their different outward Appearance. Some Stones have an uneven and angular Surface, as those that come from Spain; some are clustered on the Surface, like Bunches of Grapes, from whence they are termed *Hamatites Botryodes*, as we see in those brought from the *Hercynian Forest* in Germany. Others are formed in various Convolutions, like Intestines,

or the outer Surface of the Brain ; and these Surfaces are very well delineated by *Aldrovandus* and *Imperati*. In Iron Mines, the Blood-stone is often found, in a distinct Ore ; but where-ever it grows, there are always red Stones, and red Earth, near it. It is likewise found sometimes in the same Places with the Load-stone, and indeed there is a great Affinity between these two, as being both reckoned Iron Ores. The Blood-stone is dug up in many Places of *Germany*, in *Italy*, and *Spain*, and this last is reckoned the best. That Blood-stone is to be made Choice of, which is hardest and smoothest, without any Mixture of Filth or Veins ; and this Stone is carefully to be distinguished from another, something like it in Colour, but softer, which Painters and Joiners make Use of, called by Mistake in some Books *Hematites*, but its true Name is *Rubrica Fabrilis*, or Ruddle. Blood-stone is a Kind of Iron-Ore, from which Iron may be extracted ; and, in the Valley of *Joachim* in *Bohemia*, the Mines of these Stones are so rich, that it is thought worth while to extract the Iron from them, which is also excellent in its Kind, as *Agricola* relates. This Stone is dissolved by Acids, in the same Manner as Iron, and, with the vitriolic Acid, is turned into green Vitriol. Both *Dioscorides* and *Galen* used Blood-stone in Roughnesses and Cicatrices of the Eyelids ; and for this Purpose they first rubbed it upon a Whet-stone with Water, a Decoction of Fenugreek-seeds, or the White of an Egg ; and they commend it, when diluted in Milk, in Suffusions of the Eyes. In all Ages it has been used in a fine Powder, from one to four Scruples, in any proper Vehicle, for all Kinds of Hæmorrhages, in Spitting Blood, and in Ulcers of the Lungs, which it dries and heals. In

the *Fluor albus*, *Cachexy*, and Suppression of the Menses, it is as effectual as the *Crocus Martis aperiens*.

Lapis Hibernicus, Offic. *Irish Slate*.

It is a fossil Stone, of a black Colour, somewhat inclining to an Azure, and of an earthy Taste ; and found in Mines, as well in *England*, as in *Ireland*. This Stone is frequently used in Contusions ; for it resolves coagulated Blood : Some say it is effectual in quartan Fevers ; but it is much us'd in all Kinds of Hæmorrhages, uterine Fluxes, and Spitting of Blood.

Lapis Lazuli, Offic. *Azure-stone*.

This is a hard blue Stone, with Gold and Silver colour'd Specks and Veins ; and is found of two Kinds, one that can bear the Fire, and the other that cannot. The first is brought from *Asia* and *Africa*, and is called the oriental Stone ; the other is found in some Places in *Germany* and *Italy*, being dug out of Gold, Silver, and Copper Mines, and is softer than the Oriental. The Oriental produces the ultramarine Blue, which never changes with Age. But the German Ultramarine is easily affected by external Causes, and in Time turns green. The best *Lapis Lazuli* is of a deep blue Colour, marked with some gold Specks, hard to break, and durable in the Fire. It purges upwards and downwards, and is recommended by Authors in melancholy Affections, quartan Agues, Apoplexies, and Epilepsies. They attribute to it a corroding Quality, with some Astringency ; the first of which, *Dioscorides* and *Galen* say, may be corrected by washing it in Water ; but they are mistaken, for both washed and unwashed, it vomits and purges, and what the Water carries off from it differs from what remains, only in the Fineness of the Parts. The blue Colour of this Stone arises, undoubtedly, from some Parts of

Copper mixed with it, from which, also, its purgative Quality proceeds; but it may very reasonably be asked, why an acrid and purgative Medicine of this Kind should be used in the *Confectio Alkermes*, designed for a strengthening Cordial? To answer this, it is to be considered, that the antient Physicians acknowledged two Virtues in this Stone, one Purgative, the other Styptic; which, though contrary to each other, were nevertheless found in the same Subject. The styptic Quality, by which it becomes a Strengtheners, they counted natural to it, when it was found in gold Mines, mixed with small Particles of Gold; the cathartic Quality they considered as merely accidental, arising from the Mixture of heterogeneous Parts. Therefore, on Account of the strengthening Virtue of this Simple, they endeavoured by various Ways to correct the other, as by repeated Ablutions and Calcinations; but whether they have succeeded or not, is with me, says *Geoffroy*, still a Doubt, though, says he, I must own, that long Experience has shewn, that no bad Accident ever happens from the *Confectio Alkermes* rightly prepar'd. Whence it may be conjectured, that by Calcination the purgative Virtue of the Stone is very much lessened, or entirely destroyed; but he cannot say, that it contributes any thing to the cordial Virtues of the Confection. The Antients thought it purged off particularly the *Atra Bilis*, but, I am afraid, upon no good Grounds; for the black Colour of the Stools, after taking it, is not so much owing to the Nature of the *Fæces*, as to the Tincture which all Steel and Copper Medicines communicate to them. As there are many Medicines of more certain Efficacy among us, we seldom use the *Lapis Lazuli*, all

the Magisteries, Tinctures, and Elixirs, which the Chymists prepare from it, being laid aside. When *Geoffroy* mentions the *Lapis Lazuli* as an Ingredient in the *Confectio Alkermes*, he means a Sort directed in foreign Dispensatories; for in ours it has been long omitted. The Dose, according to *Schroder*, is a Dram of the Stone reduced to a fine Powder.

Lapis Melittes, Offic. The Honey Stone. This Stone only differs in Colour and Sweetness from the *Lapis Galactites*; and the Effects produced by both are, according to *Dioscorides*, the same. But, according to *Galen*, it is somewhat more hot and abstergent than the *Galactites*. *Agricola* affirms, that the *Galactites* and *Melittes* are produced in the same Lime-stone Rock. *Wormius* distinguishes between the *Moroëthus*, the *Galactites*, and the *Melittes*, in the following Manner: The *Moroëthus* yields a milky Juice, which is destitute of the Sweetness of Honey, and is neither of a white nor cineritious Colour; but the *Galactites* is of a white or cineritious Colour, and yields a milky Juice, without any Taste of Honey; whereas the *Melittes* is of various Colours, and yields a milky Juice, as Sweet as Honey. But *Jo. de Laet* distinguishes between these three Stones in the following Manner: That which is of a cineritious or black Colour is the *Galactites*; that which is yellow, and in Colour resembling Honey, is justly called the *Melittes*; whereas that which is greenish is the *Moroëthus*, which shines like a Gem more than any of the others.

Lapis Memphites, Offic. Memphistone. This is a Stone of a pinguious Substance, parti-colour'd, of the Size of an ordinary Pebble, and found in *Egypt* near *Memphis*. They say this Stone, levigated, and rubbed

on the Parts which are to suffer cutting or burning, renders them insensible without Danger.

Lapis Morochthus, Offic. White Marking-stone. This Stone which some call *Galaxius*, or *Leucographis*, is produc'd in *Egypt*, and is used by the Fullers in whitening their Linen, as being of a soft Substance, and easily diluted. It is supposed to be of an emplastic Quality, and good for Spitting of Blood, the *Cæliac* Passion, and Pains of the Bladder, being taken in Water, as also for uterine Fluxes, being taken in like Manner, or applied in a Pessary. It is likewise an Ingredient in *Collyria*, or ophthalmic Medicines of a soft Consistence; for it fills up a *Cæcyloma*, and represses Defluxions: Made into a Cerate, it cicatrizes such foul Ulcers as happen in the tender and soft Parts of the Body.

Lapis Nephriticus, Offic. The Nephritic-stone. This is a Stone very much variegated with green and other Colours, as white, yellow, blue, and black, but still with a greenish Cast: It is imported from *America*, but is, also found, in some Parts of *Spain* and *Bohemia*. It is idly worn as an Amulet against Pains in the Stomach and Kidneys.

Lapis Phrygius, Offic. The Phrygian-stone. *Galen* informs us, that this Stone is found in *Cappadocia*. The best is pale, moderately ponderous, of no solid Contexture, and distinguished by white Lines. This Stone whether crude or burnt, is an efficacious Astringent. It moderately cleanses, also, and has an escharotic Virtue, and with Cerate cures Ambuitions: It is good in Diseases of the Eyes, and for Ulcers, and other Purposes; but is not at present used in the *English* Shops.

Lapis Schistus, Offic. The Cleaving-stone. It is exported from *Germany*. The best is of a metallic

Substance, and, of the Colour of Saffron; the others, which are not so good, are blackish, and consists of thin, shining, and transparent Laminæ, which stick to one another. The Virtues are the same with those of the *Hæmatites*, only weaker in every Respect. *Boetius* thinks it a Species of *Talc*; and *Agricola* perceives no Difference between it and the *Hæmatites* except in the Figure. *Dioscorides* informs us, that it fills up a *Cæcyloma* of the Eyes, being diluted with Woman's Milk; and is, also, very effectual for a Rupture, or falling out of the same Part, for Thickniess of the Eye-lids, and a *Staphyloma*.

Lapis Specularis, Offic. Muscovy Glass. This is a Fossile-stone resembling Crystal, transparent, and divisible into very thin Laminæ. It is erroneously supposed, says *P. Amman* to be the *Glacies Mariæ*, (the Virgin Mary's Looking-glass) as it was formerly believed to be the *Aphroselene* or *Selenites*: For both Opinions are fabulous; the first, because, it is uncertain whether the Virgin Mary ever made Use of such a Glass; and the last, because it neither contains the Image of the Moon, nor increases or decreases as that Planet does. We have it imported from *Muscovy*, *Spain*, and other Parts; and it is of Use in Surgery, in the Cure of sordid Ulcers. It is of Service, also, in difficult Labour, and is an *Arcanum* against the Epilepsy; and is also reckoned among Cosmetics.

Lapis Spongiæ, Offic. Sponge-stone. This is a Stone quite friable, concreted in a Sponge, and of a white or grey Colour. It is an Attenuant without any remarkable Heat, and is good to break the Stone in the Kidneys and Bladder, and also to discuss stumous Swellings. The Stones found in Spun-

ges being taken in Wine, are good to break the Stone in the Bladder.

Lapis Thyites, Offic. The Greenstone. This Stone is of a greenish Colour, resembling the Jasper; tho', when diluted, it renders the Liquor used for that Purpose of a milky Colour. It is produc'd in *Ethiopia*, is of an highly pungent Quality, and, according to *Dioscorides*, removes Specks and Dimneis of the Eyes.

Lapis Variolatum, Offic. The Small-Pox Stone. This Stone is by some idly recommended to be worn about the Neck, by Way of Amulet, in order to promote the Eruption of the Small-Pox.

Lithargyrus, Offic. Litharge. This was of two Kinds among the *Greeks*, differing only in Colour. One was yellow, called *Chrystitis*, or *Lithargyrus Auri*; the other white, called *Argyritis*, or *Lithargyrus Argenti*; and the same Distinction is still kept up. It is commonly made in those Furnaces in which Lead is separated from Silver, or where Silver is refined by Lead from the other Metals mixed with it. When the Workmen design to separate Silver from the Lead or Copper contained in the same Ore with it, they first make a Kind of Trough of Bone-ashes, in which they melt a great Quantity of Lead; and into this melted Lead they throw the Silver Ore to be purified, and continue to blow with Bellows, till all the Lead, mixed with the Copper or Lead contained in the Silver, swims on the melting pure Silver like Oil. Then they gradually blow this Lead towards the Sides of the Trough, and afterwards, cutting the Sides, the vitrified Lead runs down to the Ground; and there becomes Litharge, sometimes of a Gold, and sometimes of a Silver Colour; whence the Dealers in those Commodities have given out, that the one was made from

Silver, the other from Gold; whereas the Difference consists only in having been more or less exposed to the Fire, or in having a greater or less Mixture of Copper. Litharge is therefore nothing but vitrified Lead, either alone, or mixed with Copper: It is frequently used in Physic in outward Applications, being mixed with oily Substances to make the Basis of most Plaisters, by Reason of the emplastic Consistence, which this and other Recrements of Lead acquire, by being mixed with and dissolved in Oils. It is of a drying, detergent, and gently astringent Quality; and for this Reason is used in incarning and cicatrizing Ulcers. It is prepared by being well levigated in a Mortar with clear Water, till all the Lead, which is not perfectly calcined, or other metallic Fæces, fall to the Bottom, leaving the finer Parts incorporated with the Water, which, subsiding by Rest, are separated from the Water, and dried.

Lithocolla, Offic. The Stone-Gluer. This is a Mixture of Marble, or Parian Stone, with Bull's Glue. It is of Service, being applied with a heated Probe, in laying hold of the Hairs which incommode the Eye.

Ludus Paracelsi, Offic. Waren Vein. It is a Stone of the Colour of yellow Amber, but more opaque, of different Sizes, distinguished by transcurrent Lines of a dark Ash-colour like Veins. It is frequently found in Maritime rocky Places, and is recommended by *Paracelsus* for a Lithontriptic. Doctor *Grew* thinks it a good Diuretic, and that it may be of Use for expelling Gravel.

Magnes, Offic. The Load-Stone. This is a ferruginous, dense, fossil Substance, of a blackish, bluish, or reddish Colour, attracting Iron, or another Magnet, or repelling them; and directing its Poles, always to those of the World, when

it is at Liberty to move. This Substance is not to be confounded with the *Magnes* of *Theophrastus*, which he says, was white, and shining like Silver; not hard, but easily made into Vessels by the Turners Art; neither did it attract Iron. It was however, named from the same *Magnesia* in *Lydia*. Another Name of the Load-Stone is *Lapis Lydius*, which is also applied to what we call the Touch-Stone, by which the Truth of Gold and Silver are tried. These two Significations of *Lapis Lydius* are, therefore, carefully to be distinguished, because they are very different. The Load-Stone is found in many Parts of *Europe*, and for the most Part in Iron Mines; but the best are those which come from the *East Indies* and *Ethiopia*. It is undoubtedly, a Kind of Iron Ore; and in some Places of *Germany*, they actually extract the Iron it contains: When exposed in the *Focus* of a great Burning Glass, it likewise manifestly discovers Iron. The Virtues of the Magnet is attracting and repelling Iron, and in its turning its own Poles to those of the World, are very wonderful; and especially its being able to communicate these Virtues to the Iron which it touches. The Load-Stone is not used inwardly in Physic; tho' *Galen* says it has the same Virtues as the Blood Stone; and also, mentions its purgative Virtues, and recommends it, on that Account in Dropsies. *Dioscorides* proposes, that it be given in the Quantity of three *Oboles*, to evacuate gross melancholy Humours. Some think it possess'd of a deleterious Quality, which is denied by others; but *Geoffroy* imagines the poisonous Quality is to be understood of that Kind of *Magnes* mention'd by *Theophrastus*, which he takes to be a Kind of Native Litharge. The true Load Stone, externally used, is drying, astringent,

and consolidating. It stops Bleeding, and is recommended by *Hoffman* for the Cure of *Hernias*. *Paracelsus* makes it an Ingredient in a Plaster, not only for extracting the Head of an Arrow from the human Body, but all manner of Dirt and Filth whatever.

Magnes albus, Mont. Exot. The white Marking Stone. This Stone is called by the *Italians*, *Calamita alba*, and *Magnes carneus*; because, as the true Load Stone draws Iron, this is suppos'd to draw Flesh. It is a white Stone, marked with black Spots, which, if laid on the Tongue, sticks very closely to it; and is no other than a Kind of rocky Marl, found sometimes in the same Mines with the Load Stone. It is foolishly and fictitiously said to be of wonderful Efficacy in Love Affairs. According to *Monti*, it absterges with an Astringency, and is reckon'd among Antiarthritics, Antiscorbutics, and Aperitives.

Magnesia, Offic. *Manganese*, Mer. Pin. *Sapo Vitri*, Mer. Art. Var. Soap of Glass. This is a fossil, metallic, ferruginous Substance, resembling Antimony in its shining Colour, and very brittle. *Pomet* mentions two Kinds of it, one Ash-colour'd, which is not easy to be got, and therefore little used; the other black, which is very common. It is used in making and purifying Glass; for by mixing a small Quantity of it with Glass, whilst in Fusion, it clears it from any green, or bluish Colours, and makes it more transparent and bright. On that Account *Merret* term'd it *Sapo Vitri*. If too great a Quantity be put in, it gives the Glass a Purple Colour. It is used by Potters in colouring their Vessels black, as the *Zaffara* is for blue. *Merret* also, says, the best *Manganese* is that which is hard, heavy, sparkling, and blackish, and which, being reduced to a Powder,

turns

turns Lead black. It is dug in Germany, Italy, Piedmont, and in England near the Mendip Hills in Somersetshire: And Merret tells us, that wherever the Miners find *Manganese* they conclude, that there is Lead Ore under it; but whether it contains any Lead, or not, has not been discover'd.

Malachites, Offic. The Malachite. This may be taken for a Species of the Jasper, or *Prasius*. It is opaque, and of a Mallow green, whence it has its Name *μαλάχη* Malache in Greek, signifying a Mallow. It is found in Cyprus, Meissen, and the Country of Tirol, and is exhibited as a Febrifuge.

Marga, Offic. Marle. This is not only of various Species, but also of different Colours, such as reddish brown, grey and yellow. It is of a pinguious and medullary Substance, found in some Stones and Rocks, when they are split. It is of a drying, constricting, consolidating, and narcotic Quality; but resolves Tartar, and coagulated Blood. *Kentman* enumerates various Species of Marles, such as the white, the pinguious, the soft, the subcineritious, and the stony Marle, used by Artists for making Images; the yellow and crustaceous Marle, which is found in sandy Grounds, and contains some Portion of Gold; and the hard, yellow, and sandy Marle found in Holland, with which the Inhabitants, as in other Countries, manure the Land.

Marga candida, Offic. White Stone Marle. This is found in Germany, and is a fungous, white, and friable Substance. It is of an astringent and refrigerating Quality; stops Hæmorrhages, and immoderate Discharges of the *Menses*. The Powder of it is by Surgeons sprinkled upon Ulcers, in order to dry and consolidate them. It is esteem'd

a powerful Cosmetic. *Anselmus Boetius*, when it is hard, refers it to the *Lapis Galactites*; but, if soft, he makes it a Species of Marle; for he is of Opinion, that the *Morochthus*, the *Galactites*, and the *Lapis Melittites*, are only indurated Marle.

Marga saxatilis cinerea, Offic. Ash-colour'd Marle. This Species of Marle is found in the Cavities and Fissures of Rocks, consists of thick Crusts, is of a cineritious Colour, and a somewhat acrid Taste. It is of an astringent, emplastick Quality, and stops Hæmorrhages, when externally apply'd, it agrees in Virtues with the *Sarnian* Earth.

Marga Saxatilis Incarnata, Offic. Reddish Marle. This Species is produced in the Mountains of *Bohemia* and *Liege*: It is a pinguious, lubricous, and ponderous Earth, of a Carnation Colour, adhering to the Tongue, and tinging the Fingers with a yellowish Hue. This Kind of Marle, is not only beneficial in Ruptures, Fractures, Desfluxions, the Hæmorrhoids, and Dysenteries; but also resists Poisons, and pestilential Disorders.

Marmor album, Offic. White Marle. This differs from Alabaster only in Hardness, and in Splendor, when polished. *Galen* tells us, that taken internally, it dissolves the Stone.

Mars. This is the Chymical Name for *Ferrum* Iron, and is sometimes called in Pharmacy, *Chalybs*, Steel. *Melampus* is the first upon Record, who exhibited Iron by way of Medicine; for he is said to have directed *Iphiclus* to take the Rust of a Knife, and drink it in Wine, ten Days together, in order to procure him Children. Iron is the most useful Metals for human Life; for, besides the innumerable Kinds of Instruments made of it, it furnishes excellent Remedies in many Diseases. The Medicinal Virtues of Iron, taken

taken inwardly, were not unknown to the Antients. *Dioscorides* attributes to it an astringent Virtue, and recommends it in uterine Hæmorrhages. He likewise, orders Wine, or Water, in which a red hot Iron has been quenched, in the Cæliac Passion, Lientery, and Dysentery, and for restoring weak Stomachs. Physicians now acknowledge a twofold Virtue in Iron, one aperient, the other astringent; for it is observ'd to cure a Suppression of the *Menses*, to open Obstructions of the Liver, and Spleen, and other *Viscera*, to stop Hæmorrhages and Diarrhæas, and to strengthen the relaxed Fibres of the Intestines. On these Accounts it is reckon'd the grand Specific in Hypochondriacal Affections, and all Kinds of *Chlorosis*. Some attribute an aperient Virtue to some Preparations of Iron, and an astringent Virtue to others; but the Truth is, all these Preparations are both astringent and aperient, tho' not in the same Degree. For Medicinal Uses, Iron is preferable to Steel; and the Filings of Iron, reduced to an *Alcohol*, or impalpable Powder, are prefer'd by many, to all other Preparations, in promoting the Flux of the *Menses*, and in removing Obstructions of the *Viscera*, being given from twelve Grains to half a Dram, once or twice a Day, in any convenient Form. Filings of Iron, tied up in a Linen Bag, are also prescribed to be infused in aperient Apozems, and alterative Broths. *Sydenham* tells us, that he was inform'd, "That the crude Ore of Iron, is more efficacious in curing Diseases, than Iron which has been refined by Fusion; but, for the Truth of this, says he, I had only the Author's Word, not being assured of it by my own Experience." And I have seen a Kind of Iron Ore, called at the Iron Works, *Cumberland Ore*, which

very much resembles Bole, and which rub'd with Quicksilver, unites with it, forming a Kind of Cinnabar, which promises very fair to be an excellent Deobstruent. There is a Styplicity in Iron, by which it braces up the Vessels and *Viscera* when relaxed; hence the Organs of Digestion, when weak and relaxed, are strengthen'd and enabled to perform their Offices. Hence also, by a prudent Use of Iron, the contractile Force of the Arteries is increas'd, and in Consequence of this, the Circulation is accelerated, and Obstructions are removed. But for the same Reason that Iron or its Preparations are of Service in a Weakness of the Solids, and a Languor of the Circulation, it becomes prejudicial in a high Degree, when the Solids are too tense, the Circulation too brisk, and the Constitution inclin'd to Inflammation. Prudent Practitioners also, will be very cautious of exhibiting Iron in a full Habit of Body, without previous Evacuations, because otherwise by increasing the Velocity of the Blood, in such Habits, Hæmorrhages, Fevers, Apoplexies, Convulsions, all Kinds of Nervous Disorders, and Death, will not unrequently be produced. And for the same Reason it is always prudent to administer Steel, as it is called, or Iron, after due Evacuations, gradually, and in such Doses, as will not accelerate the Circulation too suddenly. Steel properly so called, is not so good as Iron for Medicinal Uses.

Melanteria. This is already specify'd under the Article *Chalcitis*.

Mercurius. Mercury, or Quicksilver. This is a fluid, metallic Substance, cold to the Touch, of a shining Silver Colour, very heavy, volatile, and which will unite with most Metals, especially Gold, to which it joins itself very closely. It is sometimes found in its fluid Form

in the Bowels of the Earth ; and in that Case, it is first well washed with Water, to clear it from the Earth ; then sometimes with Vinegar and Salt, to carry off all other metallic Parts ; and lastly, it is passed thro' Cotton, or dress'd Leather, and then has the Name of Virgin Mercury. It is also found in Glebes, or in Form of a red sulphureous Mercurial Mineral, called Cinnabar, or of a stony Glebe, sometimes red, sometimes yellow, sometimes dark, and sometimes of a Lead Colour. It was by the Antients rank'd among Poisons. *Dioscorides* ascribes pernicious Effects to it ; and from his Authority, doubtless it was, that *Galen* reckon'd it highly corrosive ; for he owns he never made any Trial of it himself. The Name of it is not found in *Hippocrates* ; whence it is probable, that it was not in Use in his Time. But before *Avicenna* it was used externally, though seldom internally, being still reckon'd a Poison by most Physicians. *Actuarius* ranks it, however, among Medicines ; but *Mesue* applied it only for curing cutaneous Diseases, though *Avicenna* observes, that many had drank it without any bad Effect, and that it passed through the *Anus* unchanged. About two hundred Years ago, though it was still believed by some to be poisonous, it began by many to be used inwardly ; they having observ'd, as *Fallopian* relates, that it was given in that manner by Shepherds to their Cattle, to kill Worms, without any bad Effect ; whence they concluded, that it might be safely given to Men also, and that therefore, crude Mercury was not to be reckon'd a Poison. Thus *Brassavolus*, and *Carolus Musitanus* tells us, they gave it to Children troubled with Worms, from two to twenty Grains, and always with some Success ; and that several Midwives gave it to Women in difficult

Labours, though perhaps, not always with any visible good Effects. *Matthiolus* relates, that some Women with Child drank each a Pound of Quicksilver to procure Abortion without any bad Consequence ; and it is commonly known, that the Workers in Quicksilver take this Method to cheat their Masters of considerable Quantities, by first swallowing it, and then voiding it with their *Fæces*, from which it is easily cleansed by simple washing. It must, nevertheless be owned, that the Use of it, whether outwardly or inwardly, can never be long continued without Mischief ; for the Miners, and others employ'd about it, though of the strongest Constitutions imaginable, seldom remain four Years in that State, but are seiz'd with Tremblings and Palsies, and diemiserable. By an injudicious Use of it, whether outwardly applied, or inwardly taken the Nerves are likewise affected, weaken'd, corrupted, and contracted ; whence Tremblings, Spasms, Palsies, and too great an Attenuation of the Fluids, which often brings on a fatal Salivation, Ulcers in the Mouth and Throat, and incurable Loosenesses. Quicksilver judiciously administer'd, is, however, undoubtedly a most excellent Medicine ; it opens the Pores, small Vessels, and Ducts of the Glands ; resolves obstructed Humours, attenuates those which are too thick, and viscid, especially the *Lymphae* ; and dissipates Concretions, even in the remotest Parts of the Body. On all these Accounts it is found to be of singular Service in Tumours, swell'd Glands, a schirrhous Spleen, Mesentery, or Liver, Ganglions, *Strumæ*, and other such Diseases. It also blunts the Acrimony of the Fluids, and hence performs Wonders in Venereal Tumors, Buboës, and Ulcers, in cutaneous Pustules, Scabs, and other Affections of the Skin ; universal Remedies of the

the Preparatory, and especially of the evacuating Kind, having not only gone before the Use of Mercury, but being continued along with it. For as all these Diseases arise from a viscid *Serum* become caustic by a long Stagnation, if it be divided and reduced to a fluid State by Quicksilver, before a Passage is prepared for it out of the Body, it must either exert its Efficacy on the Part where it was first lodged, or, by removing to the more noble Parts of the Body, bring on Symptoms more dangerous than the first. Therefore before the Patient begins to take Mercury in any Form, his Body ought to be cautiously prepared by Bleeding, to lessen the Plenitude of the Vessels; by warm bathing, and the Use of diluting Medicines, that the Humours may become more fluid, and the solid Fibres softer; as also, by purging, that Way may be opened for the Passage of the dissolved Humours out of the Body. These Passages are also to be kept open during the Time that the Quicksilver is taken, lest the Humours be intercepted in their Course, and be turned a more dangerous Way; and the Patient ought to be kept warm, lest Cold should stop or diminish insensible Perspiration, which ought likewise to be encouraged by gentle Exercise. Quicksilver, not only taken inwardly, but also by Unction, evacuates the Humours by Stool, Sweat, and insensible Perspiration; but the most common Method of its Operation, is by the Evacuation of a mucous *Saliva*, whence it is termed a Salivation. This Way of Purging was entirely unknown to the Antients, and is thought the most effectual Remedy for Venereal Diseases; for the Cure of which it was first used by *Jacobus Carpenfis*, a Physician of *Bologna*. That is to be esteem'd, which is most pure, of the most

shining white Colour, most fluid, and which being evaporated, leaves no Remainder behind it. That is to be rejected, which is of a livid or pale Colour, which does not run into Globules exactly spherical, but oblong, resembling little Worms or Tears, which are sure Signs, that it is adulterated with Lead, Bismuth, or some other Metal. Mercury is sometimes so adulterated, as to produce very terrible and uncommon Symptoms: Thus Mercury is commonly adulterated with Lead; and this Fraud is, I think, adverted to by *Quercetan*, for by the Intervention of *Bismuth*, Lead, if its Quantity is not too large, may be forced thro' Leather, and rendered so fluid and moveable, as to prevent all Suspicion of Fraud. Hence 'tis obvious, how insufficient and superficial the Depuration of Mercury must be by such an Expression alone. But what terrible Effects are produced by Lead internally taken, is sufficiently obvious to any one, who is but a little conversant in the Writings of practical Authors; and a small Quantity of it is absolutely deleterious, when treated in a Manner not unlike that used when Mercury is adulterated with it. Crude Mercury is given in Substance, to kill Worms, from a Scruple to three Drams; being first well rubbed with Sugar in a glass Mortar, till it is dissolved into invisible Parts, adding a Drop or two of Oil of sweet Almonds, to keep it from returning to its native Form. Decoctions of Quicksilver are likewise much used, being made by boiling a Pound of Mercury in six Pints of Water for an Hour. The clear Liquor is given both to Children and Adults for their common Drink. Quick-silver is a great Enemy to all Sorts of Vermin, as well as to Worms; and it suddenly kills, or banishes them, being applied in an Oint-

Ointment to any Parts of the Body where they are found. Crude Mercury is likewise given in very large Quantities in the Iliac Passion, even two or three Pounds; and it often succeeds in removing the Obstructions: But if the Obstruction be very great, so that the Mercury remains a great while in the Intestines, it may do them an Injury, merely by its great Weight. To cure the Itch, Quick-silver Girdles are used with very good Success, when the Precautions abovementioned are duly observed. The Quick-silver is to be beat up with the White of an Egg, till both are turn'd to a thick Froth, which is rubbed on a Cotton Girdle, and, when dry, is wore round the Loins. It is very well worth the Notice of every Practitioner, that Mercury, or its Preparations, apply'd either externally, or taken internally, is an almost infallible Remedy, for that Disorder which is induc'd by the Bite of a mad Dog, and a certain Preservative against it, and it has of late Years been used with great Success in many Distempers, which were before esteem'd extremely obstinate, if not incurable. *Rotario a Veronese* Physician, of great Reputation, has wrote a Volume in *Folio*, on the Virtues of this *Herculean* Remedy. He advises to divide it with Goose-Grease, for external Application, and for internal Use to mix it with Conserve of Roses. He recommends it extremely in the Gout, conformable to the Sentiments of *Frederic Hoffman* upon that Subject, in the Dropsy also, even an *Ascites*, an *Asthma*, and many other obstinate chronical Distempers, he assures us from Experience, that he has found it of infinite Service. But he seems to think it of much greater Service, when exhibited without raising a Salivation, than when it excites one, and in this he agrees with many others of the Moderns,

who have wrote upon the same Subject.

Naphtha, Offic. This is of the Colour of the *Babylonian* Bitumen, of a liquid Consistence, very subject to take Fire, sometimes white, sometimes black; it is seldom or never to be met with in our Shops; and therefore *Petroleum* commonly supplies its Place. It is a Liquor of an oily Substance, like rectify'd Spirit, very thin, pellucid, very penetrating, and subject to kindle into a Flame: It agrees in Virtues with *Bitumen*. There are some, who, as *Agricola* assures us, are persuaded, that the *Camphora* of the Antients was prepared of *Naphtha* by Sublimation; others there are, who will have it, that *Naphtha* and *Petroleum* are one and the same Substance; but since we are not as yet certain what *Naphtha* is, we shall not venture to determine in the Case. As for *Naphtha*, tho' it has many, and those very considerable, Virtues in Medicine, which *Dioscorides* insists upon at large, yet, at present, we are told by *Kempfer*, that he never knew the *Persians* apply it to any other Use, than to temper their Vernish.

Natron. This is the Nitre of the Antients, but is very different from our Nitre. It is a native Fossile dug out of the Earth, not pure but got by Lixiviation from the Earth, and is of an alkaline and absterfivè Nature, so that it might well serve instead of Pot-ashes, for the making of Glass or Soap. It was produced in *Egypt*, and now, at present, they dig at *Smyrna*, an Earth that is purely alkaline, which comes to *Paris* in great Quantities, and is used instead of Pot-ash. *Clusius* writes, that the Nitre of the Antients is so common at *Cairo*, that ten Pounds of it will hardly yield a *Meyden* (three Halfpence.) They use it for several

Purposes; for they incrust Vessels with it, and mixed with the Pods of *Acacia*, it serves to dry Leather. *Bellonius* informs us, that the Nitre of the Antients is very rarely found amongst us; and confidently asserts, that there is not a Grain of that Nitre in *Europe*; but that in *Egypt* there is nothing more cheap and common. This Nitre was not combustible, and inflammable like ours, and, consequently of no Use in making Gun-powder. This Difference being supposed, it plainly follows, that what we find in ancient Writings, as those of *Hippocrates*, *Pliny*, *Dioscorides*, *Galen*, and others, of Nitre and its Virtues, is not to be understood of our common Nitre, but of a native alkaline Salt. But though *Bellonius* denies that there is a Grain of this alkaline Salt, or Nitre of the Ancients, to be found in *Europe*, *Hoffman* is of Opinion, that though we have not so great Quantities of nitrous alkaline Salt in the Earth of *European* Countries, as in that of *Egypt*, yet that a purely alkaline fixed Salt may be produced from the Bowels of the Earth, with all the Properties of Pot-ashes, or Salt of Tartar, or Nitre of the Antients which is sufficiently proved by medicinal Springs, Baths, and Waters. For a very pure alkaline Salt is extracted out of many of them; for Instance, the *Selteran* and *Antonian* Waters, and in *Bohemia* those of *Buckfouerling*, and *Wildungen*, which yield a very pure *Sal Alkali*, as do the *Caroline* and *Emsen* Baths; as the Springs of *Schwalback* and *Egra* produce an Alkali, and with it a Salt of a middle Kind. So that I think it can no longer be doubted, but that our Earth contains a fixed alkaline Salt, which is imbibed and carried off by the Waters. This Consideration will, also, serve to confute the vulgar Notion of our modern Chymists, that fixed *Sal Alkali*

was the mere Product of Art, and obtained by Fire; nor could be extracted otherwise than from the Vegetable Kingdom, by Way of reducing Vegetables to ashes.

Nitrum, Offic. Nitre. This is very different from the Nitre of the Antients, for an Account of which see *Natron*. Our Nitre is artificially prepared of two Elements, or Principles, one of which is the highly Simple, universal, Acid, and primogenial Salt contained in the Air, and the other an alkaline, sulphureous and pinguious Earth, which like a Matrix, or Load-stone, attracts the universal Acid lodg'd in the Air. Nor are Earths of every Kind, when expos'd to the free and open Air, fit for generating Nitre, but only such as are of an alkaline Nature, and contain a pinguious and sulphureous Substance. Hence, we find, that the Earths, left after the burning of Houses, are of all others the most proper for generating Nitre. The same holds true of calcareous Substances; when, for Instance, Mud, Earth, or Clay, is mix'd with Lime, and expos'd to the free Air, the Salt of Nitre easily breaks thro' it like Froth. Quick Lime also, the Ashes of Wood, or of Soap-Boilers, as yet turgid with an alkaline Salt, greatly contribute to the Production of Nitre, when mix'd with Earth. The Earth proper for generating Nitre must not only be alkaline, but, also, pinguious and sulphureous; nay, a volatile alkaline Principle is necessary for this Purpose. Hence all Putrefaction contributes to the Generation of Nitre in Sands. For this Reason nothing in Nature so powerfully promotes the Generation of Nitre, as dunging the Land with the Excrements and Urine of Animals. Hence those who prepare Nitre, diligently dig up and preserve the old and squalid Earth, in Sheep-folds, Stables, and other Places where Ani-

mal

imals are kept. They also, carefully collect the Earth dug up about Bog-Houses, which being impregnated with the Salt and Sulphur of the human Excrements, is, for that Reason, highly proper for producing Nitre. They also chuse pinguious Earths of Church-Yards, Ponds, Marshes, and Walls, built of a pinguious Earth, and putrified Straw, especially their Surfaces taken off for about the Depth of a Finger's length, because these, being long exposed to the Sun and Air, have conceived a nitrous Salt, discoverable by the acid and bitterish Taste. Hence it follows, that the more Putrefaction and volatile sulphureous Salt can be convey'd to the Earth, the more proper they are for producing Nitre. Earths, in order to yield a large Quantity of Nitre, must be managed in the following Manner: They are to be made up in Heaps, which are to be frequently watered or sprinkled with the Urine of Animals; by which Means, and the free Passage of the Air thro' them, they soon contract a nitrous Salt. But 'tis to be observed, that neither a too intense Heat of the Sun, especially such as burns the Earths, nor too pinching a Cold, nor too moist an Atmosphere, and especially rainy Weather, but rather a temperate windy Air, accompany'd with serene Weather, especially in the Spring or Autumn, and in the Night time, favour the Production of Nitre. The Heat of the Sun, is indeed, serviceable in drying the Earths from which the Nitre has been before extracted, but does not at all contribute to its Generation. Nor is its Generation promoted by intense Cold, southerly or westerly Winds, but by Winds blowing from the easterly or northerly Quarters bring the promogential ethereal Acid. The Elaboration of Nitre does by no Means succeed under excessive Rains, which wash it out of the Earths. 'Tis also, to be

observed, that from Waters impregnated with a nitrous Salt, by Elixivation, there cannot be obtained any true Nitre, which is inflammable, and forms itself into Crystals, without the Addition of Ashes, in which there is an alkaline Salt, an Admixture of Quick-Lime, or that Lixivium which in boiling remains after former Crystallizations; for if the Lixivium, drawn from nitrous Earths, is boiled by itself, a saline *Magma* is only obtain'd, which neither runs into dry, much less inflammable Crystals, nor is easily dried, but is readily dissolved in the Air, especially when moist and humid. Hence we may reasonably conclude, that the inflammable Salt of Nitre is compounded of an acid Salt, a fixed Alkali, and a sulphureous Principle. And as neutral Salts are easily formed into Crystals, so, on the contrary, neither acid nor alkaline Salts, nor sulphureous acid Substances, mix'd with alkaline Earth, of which Kind this Lixivium, extracted from nitrous Earths, seems to be, are disposed to Crystallization. But that there is in Nitre such a fixed Alkali, is sufficiently obvious, not only from its Generation already described, but, also, from this, that Powder of Charcoal alone, added to Nitre fus'd in a Crucible, converts it into a pure alkaline Salt, commonly called fixed Nitre, tho' it is not, in Reality, different from Salt of Tartar, or any other alkaline Salt; as also from this Circumstance, that if this alkaline Salt is again combined with acid Spirit of Nitre, or *Aqua Fortis*, the Nitre is forthwith regenerated. Earths impregnated with a nitrous Salt, of which Nitre is prepared, are not only to be found in *Europe*, but 'tis, also, certain, that an inflammable Nitre may be prepared every where, because the Matter, or *Matrix* of Nitre, which is Earth rendered alkaline and sulphureous by Putrefac-

tion, may be had every where. Neither is it to be doubted, but that the primogenial and universal Acid, which is formed into a nitrous Salt with the alkaline sulphureous Earth, is contained in the Atmosphere, wherever it extends. And, 'tis certain, that not only in the *Indies*, which are hot, but also in *Muscovy*, which is a cold Climate, a large Quantity of Nitre is prepared, which is better than the *German* Nitre, and far more fit for preparing Gun-powder. The *Indian* Soil favours the Generation of Nitre, because for several Months, no Rains fall to wash and carry off the nitrous Salt from the Earth.

The essential Characters, and Properties, by which Nitre is distinguished from all other Salts, are these (I.) Nitre is, by the Force of Fire, easily fus'd in a Crucible without flaming; but as soon as an oleous sulphureous Substance, capable of flaming, is added to it, it takes Flame, and produces an Explosion; which Effect happens not only by the Addition of common Sulphur, of Antimony which abounds with Sulphur, of Charcoal, of Tartar which abounds with Oil, of some Parts of Animals, the Blood or Bones, for Instance; but, also, by the Addition of Metals impregnated with Sulphur, such as Tin, Iron, and Zink; as also, by an Addition of *Sal Ammoniac*, which from the Urine receives a certain oleous, and sulphureous Principle. (II.) Nitre, mix'd and distill'd with a vitriolic Salt, or the Acid of Vitriol, yields an highly volatile acid Spirit, of an ungrateful Smell, and yellowish Colour, as appears in the Preparation of *Hoffman's Spiritus Nitri Fumans*, or *Aqua Fortis*; and because all Clay contains some Quantity of a vitriolic Salt, hence if three Parts of Nitre are mix'd with one Part of Clay, form'd into small Balls, and dry'd, the Nitre by Distillation yields

its acid Spirit in the Form of a red Vapour; and because the Acid of Alum is of the same Nature with that contain'd in Vitriol, hence in Conjunction with Alum, as well as with Vitriol, an acid Spirit, or *Aqua Fortis*, may be distill'd from Nitre. It must, also, be observ'd, that no other Acid, except one of the vitriolic Kind, can by any Means extract the Acid of Nitre, since a very fix'd and strong Acid, such as that contain'd in Vitriol and Alum, is requir'd for that Purpose. (III.) Nitre, fus'd in a Crucible, is almost totally converted into an alkaline Salt; and this Effect is particularly produc'd mixing equal Quantities of Tartar and Nitre, and putting them into an ignited Crucible; by which Means the *Black-Flux-Powder*, commonly used by Workers of Metals in separating their Metals from adventitious Mixtures, is produc'd. Nitre, is, also, converted into an highly pure *Alkali*, when it is mixed and detonated with Powder of Charcoal; and by a strong Calcination it becomes an highly caustic Salt, of a Sky Colour, and this is call'd fix'd Nitre. 'Tis also, worth our Observation, that the whole of Nitre may be converted into a caustic Alkali, of an highly acrid Taste, and which, by pouring Water upon it, becomes intensely hot, when mix'd with an equal Quantity of Regulus of Antimony, and melted together to a Mass, in a red hot Crucible. The same *Phenomenon* is said to be produced with Zink and Tin. (IV.) Nitre is a Salt of so singular a Quality, that there is none like it in Nature; for it not only cools the Tongue, when applied to it; but also the whole Body, when taken internally; and, when put into Water, augments its Coldness. (V.) A Solution of Nitre, put into Blood coagulated, and become black after it is taken from the Veins, not only renders it more fluid, but,

also, procures it a florid and beautiful red Colour; an Effect not to be expected from any other neutral Salt. By this Experiment we may, in some Measure, account for its Operations, and refrigerating Effect, on the human Body; for Nitre is a Salt, which, by Means of its aereo-acid Principle, is of an elastic and expansive Quality, allays and stops the tumultuous and exorbitant Motion of the Sulphur in the Blood and Humours, which, when confin'd, becomes more violent: And to this aereo-acid Principle, we are to ascribe the Fluidity, and florid Colour, which Nitre communicates to the Blood. Nitre, also, by procuring a greater Fluidity to the Humours, removes Stagnations, and Obstructions, and opens the Pores of the Skin, thro' which the hot and fiery Particles are exhal'd: And as Nitre stimulates the Ducts and Glands to a more copious Secretion of Lymph, hence it moistens the Body, and relaxes and softens Parts spasmodically constricted. (VI.) Nitre, when detonated with Sulphur, or any other inflammable Substance, is totally carry'd off in Smoke; by which Means, the whole *Crafsis*, and as it were, the Substance of Nitre, which consists of an acid and alkaline Salt, together with a pinguious and sulphureous Substance, is totally destroy'd; for *Gun-powder*, kindled in a tubulated Reort, is neither transform'd into an acid Spirit, nor an alkaline Salt, but yields a somewhat acid Phlegm. (VII.) 'Tis also, a Property peculiar to Nitre, that, when put into a Crucible, exposed to a calcining Fire, with Regulus of Antimony, Zink, Bismuth, Arsenic, Regulus of Cobalt, Tin, and Lead, it converts them to a Calx; by which Means the purer Metals, such as Gold and Silver, are separated from them. For this Reason, the most expeditious Way of separating Gold dispers'd in Antimo-

ny, is to calcine and fuse it with Nitre; whereas 'tis a speedy and laborious Task to separate its reguline and antimonial Parts by the Force of intense Fire; and as these Minerals are, in a great Measure, virulent, so when calcined with Nitre, they not only lose their deleterious Qualities, but partly become salutary Medicines. (VIII.) 'Tis sufficiently known to Chymists, that *Aqua Fortis* dissolves Silver, but not Gold; but it has not as yet been adverted to, that *Aqua Fortis* distill'd by Abstraction from common Nitre, does not dissolve Silver, but converts it to a Calx; whereas it quickly attacks and dissolves Gold. This will perhaps seem strange to him, who considers that *Aqua Fortis* is the Offspring of Nitre, and in every Respect agrees with the acid Spirit of Nitre, but his Surprise will cease, when he reflects, that in undepurated Nitre there is a large Quantity of common Salt, which must be separated by Art; and considers, that *Aqua Fortis*, drawn off common Salt, becomes an *Aqua Regia*, capable of dissolving Gold; for, if *Aqua Fortis* is even ten times drawn off depurated Nitre, its Virtues will not be alter'd by common Salt; but, if common Salt is mixed with the Nitre, the *Aqua Fortis* attacks and disentangles it; by which Means an highly subtle Spirit of Salt ascends, and this Spirit, in Consequence of its highly penetrating Subtilty, enters the most minute Pores of Gold, and, by Means of the elastic Sulphur of the Nitre, destroys the Cohesion of its constituent Parts. (IX.) 'Tis also, to be observed, that if Spirit of Nitre, or *Aqua Fortis*, are in a due Proportion drawn off common Salt, there remains in the Bottom a Salt, which desagrates like Nitre; for the Acid of Nitre intimately associates itself with the alkaline Earth of common Salt, and with it is converted into

into Nitre, from which it expels the Spirit of Salt. Tho' Substances highly volatile enter the Composition of Nitre, it is nevertheless of a very fix'd Nature. The Volatility of its Principles is sufficiently obvious from the Account before given of its Generation, whilst, on the other Hand, its fix'd Nature is evinc'd from this, that it remains fus'd over a Fire for some Hours, without any Diminution of either Weight or Bulk; neither is its Texture alter'd by Flame, tho' a Change is soon produc'd in it by the Addition of a small Quantity of ignited sulphureous Earth. Tho' an highly volatile and corrosive acid Spirit, as also a very caustic fix'd alkaline Salt, may be prepared from Nitre, yet it is possess'd of a singular Power of removing the Septic, and consequently the virulent and corrosive Qualities of almost all Substances, and rendering them propitious, temperate, and salutary. The violent and emetic Virtues of *Regulus* and Sulphur of Antimony are sufficiently known; and 'tis certain, that by the Addition of a due Quantity of Nitre, and the Assistance of Fire, both these may be converted into mild, temperate, and gently diaphoretic Medicines. That most of the Insects, which, by Means of their highly acrid Salt, excite Blisters, are excellently corrected by Powder of Nitre, intimately mix'd with them, is certain from Experience: Thus *Cantharides*, and other Substances of a like Nature, may be safely exhibited even in delicate Constitutions, in order to remove a Difficulty of Urine, provided due Regard be had to the Causes of the Disorder, and a small Quantity of Camphire, which powerfully resists Inflammation, is added. Some Purgatives are so highly drastic, that, when imprudently exhibited, they raise violent Commotions in the nervous System, and often excite an Inflammation in the

Coats of the Stomach: Of this Kind are Gamboge, Scammony, Resin of Jalap, Coloquintida, *Elaterium*, and Spurge; which two last excite Blisters, when applied externally. Now the caustic Quality of all these is greatly impair'd, by being mixed with any nitrous Salt, and if there is any genuine and efficacious Corrector of Purgatives, which guards the tender Membranes against Heat, Spasms, and Inflammations, 'tis certainly Nitre. Aloes, which is otherwise of a laxative and balsamic Quality, has by its subtiler acrid Salt been frequently observ'd to excite Hæmorrhages; but it is render'd more benign and propitious, by a proper Admixture of Nitre. The Bile, in Consequence of its detersive and bitter Quality, is a balsamic and natural Medicine, without which no Animal can long remain sound, and in a due State: Now, if the Bile is vitiated by a Congestion of acrid Sordes retain'd in the Humours, it acts like Poison by irritating the nervous System, and producing preternatural Heat, Anxiety, Inquietudes, enormous Evacuations, and intense Pains: Now, in order to correct this peccant State of the Bile, no Medicine is more efficacious than Nitre. As Nitre is a powerful Cooler, when internally exhibited, so there is no more effectual Antifebrile, no Medicine which either so soon, or so safely, corrects the febrile Heat, and removes the woeful Train of Symptoms produc'd by it. Accordingly *Angelus Sala* informs us, that in quotidian and chronical tertian Fevers, as also, in that Species of Fever call'd the *Putrid Hemitritæus*, Nitre is used with wonderful Success; for when the Patients are properly purged before, and kept in a moderately warm Place, the Exhibition of Nitre twice or thrice two or three Hours before the Paroxysm, gives such a Change to the State of the Disorder,

that Health soon succeeds: And as all other Refrigerants, the most considerable of which are Acid, inspissate and coagulate the human Juices, so, on the contrary, Nitre attenuates and renders the whole Mass of Humours more fluid: Hence we understand why it is highly efficacious in extinguishing the Heat of the Body, and why no Salt is more friendly to the Constitution than Nitre. Upon injecting various Liquors into the Veins of Animals, it has been found, that several of them have been kill'd both by acid and alkaline Injections, only with this Difference, that the Acids produced too great a Coagulation, and the Alkalies too great a Fluidity of the Humours. But *Malpighi* informs us, that he injected a Solution of six Ounces of Nitre into the jugular Veins of a strong Dog, without producing any other Change, than a preternaturally copious Discharge of Urine. Hence we may justly conclude, that Nitre is excellently suited, and highly friendly, to the *Crafts* of the Blood: For this Reason *Lord Bacon* affirms, that a Scruple of Nitre frequently exhibited for a Dose, contributes greatly to the Prolongation of Life. Besides, Nitre seems to have a Kind of formal Existence in the human Blood, which, when dried, reduc'd to a Powder, and thrown upon live Coals, produces a Kind of Ebullition like that of Nitre. Nitre, also, prevents Putrefaction in Substances subject to Corruption; and tho' common Salt is highly efficacious for this Purpose, yet 'tis doubted, whether Nitre is not preferable to it in preserving Bodies. Thus Blood taken from the human Veins, may, by an Admixture of a Solution of Nitre, be for a long Time preserv'd fluid and beautiful, without any Putrefaction. Besides 'tis sufficiently known, that Flesh either by Means of Nitre alone, or Nitre mix'd with common

Salt, for a long Time retains a beautiful red Colour, even after boiling; the Reason of which seems to be, that this Salt exalts the red and beautiful Colour of the Remainder of the Blood contain'd in the minute Vessels of such Flesh. Hence 'tis obvious, that Nitre resists the Putrefaction, which is often form'd in the *Primæ Viæ*, and diffuses itself thro' the whole Body; and may for this Reason be exhibited with Success in putrid Fevers, and Disorders of Children arising from Worms. Nitre, taken internally, powerfully promotes the Excretions by Stool, Urine, and Sweat: One Ounce of depurated Nitre, dissolv'd in Water, renders the Body soluble, and procures some Stools, tho' it answers these Intentions better, when mixed with a proper Quantity of the laxative Decoctions of Tamarinds, Sena Leaves, and *Manna*. When the Fluids are to be deriv'd to the inferior Parts of the Body, especially in Fevers, Nitre is highly efficacious. Among all the Class of Diuretics, none are better calculated for quickly removing the Obstructions of the urinary Ducts, rendering the Discharge of the Urine free, and dissolving calculous Concretions, than Nitre. *Penotus* affirms, that if a proper Dose of Nitre is taken once every Fortnight, it never suffers the Generation of Sand in the Kidneys, either in Patients subject to calculous Concretions or Dysuries, whether adult or young, robust or delicate. *Timæus* informs us, that he heard of a certain Man's being perfectly cured of the Gravel, by a long protracted Use of prepared Nitre; and *Grullini* informs us, that the *Sal Prunella*, is not only an excellent Preservative against, but also, an efficacious Cure for a *Nephritis*; and *Hoffman* tells us, he has found from Experience, that an Emulsion of various Seeds, invigorated with Nitre,

tre, is with great Success exhibited for alleviating nephritic Pains. A proper Exhibition of Nitre renders Perspiration more free and liberal, in Patients afflicted with immoderate Watchings, Thirst, and intolerable Heat, because it corrects the Heat of the Blood, and checks the hot intestine Commotions of the Fluids; by which means every Thing in the Constitution is render'd calm, the preternaturally constricted Parts are relaxed, and consequently the Blood is freely convey'd to the Emunctories of the Skin. In Practice we daily observe, that the precipitating nitrous Powders excellently promote Sweat, in all Inflammations; but in languid, cold, and cachetic Constitutions, the moving Force of whose Muscles is impair'd, a *Diaphoresis* must be excited by more hot and active Medicines. Nitre is also an excellent Carminative. The Disorders arising from Flatulencies, stagnating, and pent up in the Intestines, sometimes spasmodically constricted, are sufficiently obvious to Practitioners; for which Reason they ought to be dissipated and expell'd with all Expedition. For this Purpose *Hoffman* asserts, that he has found no Medicine more effectual and successful than Nitre, either alone, or mix'd with Carminatives; since by its means, a Discharge of Wind by the *Anus* is procur'd, the Flatulencies discover themselves by their Fluctuation and Noise, and are happily eliminated with an Explosion, which is in *Hoffman's* Opinion, principally owing to a Solution and Relaxation of the constricted intestinal Fibres: For which Reason it is justly commended in spasmodic Colics, especially that of the bilious Kind, on which the Antients bellow'd the Epithet *hot*. But above all other Medicines, Nitre affords the most considerable Relief to hypochondriac and hysteric Pa-

tients, since it is excellently calculated for removing the Spasms and Flatulencies, which are the Cause of all the Symptoms incident to such Patients. But one of the most considerable and important Virtues of Nitre is that by which it resists Inflammations; for no Disorder is more injurious to the Animal Oeconomy than Inflammations; which in very acute Diseases generally destroy the Patient; since, when they seize the Stomach, they produce Anxieties and Inquietudes; when they affect the *Meninges*, a Pain of the Head, a *Phrenitis*, or Convulsions; and when the Lungs, a Danger of Suffocation: When an Inflammation happens in other Parts, a preternatural Heat of the internal, and an excessive Coldness of the external Parts, is produc'd, whilst, in the mean Time, Inflammations of the sanguiferous *Viscera* easily degenerate into Abscesses or Gangrenes. In order, therefore, to cure the inflam'd Part, Nitre, either alone, or mix'd with a little Camphire, and other Bezoardic Substances, is, of all other Things, the most efficacious; so that, if salutary Effects are not produc'd by it, the Cure may be justly despair'd of. In Practice, *Hoffman* says, he has long used such a Powder with uncommon Success, and found that in Pleurifies, a *Phrenitis*, a Peripneumony, an *Angina*, an Inflammation of the *Oesophagus*, and Stomach, and an *Erysipelas*, a frequent Exhibition of it has, in a great Measure, remov'd the Heat, the Pain, the Thirst and Watching, by exciting a gentle Moisture all over the Body, which was before dry and parched: When mix'd with other proper Ingredients, and applied externally, it also affords Relief to inflam'd Parts: Thus camphorated Spirit of Wine so dexterously prepar'd, as not to be precipitated by an Affusion of Water, when mix'd with a Solution of Nitre,

and a due Quantity of distill'd Vinegar, discusses an Erysipelas, and removes an intense Head-ach. Besides, Nitre is one of the most considerable of those Medicines calculated for the Cure of Spasms and Constrictions, the Misfortunes excited by which, in the nervous Parts of the human Body, are sufficiently apparent to those who know Diseases, and their various Causes. At least 'tis certain, that enormous Hæmorrhages sometimes arise from no other Cause, than an Inequality of the Circulation of the Blood; since the Vessels, which in some Parts are smaller than in others, being spasmodically constricted, the Blood is impetuously convey'd to the adjacent Vessels, and their Ramifications, by too much distending which, and opening their Orifices, violent Hæmorrhages are often produc'd: By this Means, Spittings of Blood, Hæmorrhages of the Nose, excessive Evacuations from the Hæmorrhoidal Veins, bloody Urine, and immoderate Discharges of Blood from the Uterus, are produc'd. In the Cure of these Disorders, the most rational Method of proceeding is, to relax the spasmodically constricted Parts, and restore a free and easy Circulation of the Humours thro' the Vessels. This Intention, as we learn from Experience, is excellently answer'd by Nitre, which in these Disorders is highly extoll'd by the most judicious practical Physicians. Thus *Riverius* extols it in an immoderate Discharge of the *Lochia*; in an excessive Evacuation of the *Menses*; in a Spitting of Blood; in Hæmorrhages attended with a malignant Fever; and for similar Purposes. And as Spasms are frequently the Causes of a Suppression of the usual Evacuations of Blood from the Uterus in Women, since its constricted Parts resist the Impulse of the Blood to the Uterine

Vessels, hence 'tis obvious, that Nitre in such a Case affords singular Relief; for which Reason *Riverius* recommends it in a Suppression of the *Lochia*; and *Grulungius* in a Diminution of the menstrual Discharge. As Pains are often the Off-spring of Spasms, so those terrible Pains, which generally accompany the Excretion of Stones which affect the Intestines, and are taken for a colical Indisposition, are happily remov'd by the Use of Nitre: And *Welschius* informs us, that by Nitre alone, a large Number of Soldiers in the *Hungarian Camp* were freed from an epidemical *Cephalalgia*. Though these Things are obvious in Practice, and confirm'd by Experience, it is, nevertheless, an additional Satisfaction to the Mind, to know the Reason why, and the Manner in which, Nitre produces these Effects in the human Body.

Ochra, Offic. Yellow Oker. It is an argillaceous Substance, of a yellow or luteous Colour, and an astringent Taste. As to its Virtues; it is drying, astringent, discutient, and represses Excrecences. It is very seldom used, and never but externally, and that principally in Marks by Blows or Stripes, and in Collisions, and for discussing hard Tumours.

Oleum Terræ, Offic. Oil of Earth. This Oil is of two Kinds, the red, and the black: The red is brought from the *East Indies*, and is of a pellucid red Colour, and has a strong Smell like *Petroleum*, but more grateful, as *Schroder* says; but as to what we know of this Oil, it is either the same with *Petroleum*, or else is unknown in our Shops. The *Indian* Oil of Earth, described by *Naubovius*, is scarcely ever brought over to us, but ingrossed by the *Afan* Potentates; but whether it be a Species of *Petroleum*, or *Naphtba*, is not yet determined. What is brought to us from the *Indies*, and sold for

Oil of Earth, is prepared of exprefsed Oil of the Cocoa Nut, mixed with medicated Earths, as *Boerhaave* fays, he has been informed by a Perfon very skilfull in thefe Matters, and therefore wholly belongs to the Clafs of Vegetables.

Onyx, Offic. The Onyx-ftone. It is an opaque, or not very lucid Gem, of the Likeneſs, Colour, and Splendor, of the human Nail, being, at leaſt, of two Colours, white and black, which appear in two diſtinct Zones, and rather opaque, than diaphanous. As to its Virtues, it is idly ſuppoſed to induce Tranquillity of Mind by compoſing the Paſſions, and to quicken the Senſes.

Opalus, Offic. The Opal. This is a beautiful Gem, of almoſt all Colours: According as the Rays of Light are refracted thro' it, it appears blue, purple, green, yellow, red, milky, and black; and hence it has been, by ſome called the Gem of Gems. The beſt Opals are found in *India*, the more ordinary Sort in *Cyprus*, *Egypt*, *Hungary*, and in ſome *Daniſh* Iſlands. They all grow in a ſoft Stone, marked with black or dark Lines. It is ſaid to agree in the ſuperſtitious Virtues aſcribed to other Gems.

Ophites & Serpentinus, Offic. The Spleen ſtone, or Ophite. It is a very hard Sort of Marble like Porphyry, of a deep green Colour, interſperſed with ſome fainter Spots of the ſame. But we are told by *Dioſcorides*, that one Species of this Stone is ponderous and black, another Aſh-coloured and ſpotted, and a third diſtinguiſhed by white Lines. All of them worn as Amulets, are whimſically ſaid to be effectual againſt the Bites of Serpents, and the Head-ach; that with the white Lines, in particular, is ſaid to cure the Lethargy, and Pain of the Head.

Oſteocolla, Offic. The Bone-Binder. This is a Substance of a ſeemingly mid-

dle Nature between Earth and Stone, white, friable, teſtaceous, fabulous; in Figure reſembling a Bone, and growing out of ſandy Places, and other ſtony Soils: It is highly commended for the ſpeedy Conglutination of Bones, becauſe it quickly affords Matter for a proper *Callus*; and conſequently haſtens the Conglutination. It alſo ſtops the *Fluor Albus*, and removes intermittent Fevers. But *Hildanus* juſtly cautions us to be very circumſpect in exhibiting it to young Perſons furniſhed with a laudable Habit of the Body, becauſe it generally leaves an unſeemly Scar; for which Reaſon he thinks it is only to be uſed in old and extenuated Patients, whoſe native Heat is weak and languid. According to *Wormius*, they in ſome Shops ſell for the Bone-binder, a Species of the *Galactites*, which is white, porous, ſmooth, ſoft, eaſily diſſoluble into a Liquor, and of a ſaline Taſte.

Oſtracites, Offic. Hobgoblings-Claw. This is a Fossil, very much reſembling the under Shell of an Oyſter, petrify'd. It is ſaid to check the *Menſes* when profuſe; to relieve Inflammations of the Breſt, and render the Skin ſmooth.

Petroleum, Offic. *Petroleum*, *Oleum de Saxo*, *Naphtha*, *Oleum Petreæ*, Mont. Exot. Oil of Peter, or Rock-Oil. It is a fat liquid Substance, of a black Colour, and a ſtrong Smell. There are two Kinds of it; one native, which flows out of Rocks and Stones; and the other artificial, which is diſtilled from Charcoal and Foffils. Of the Native, they reckon at *Paris* two Sorts:

Petroleum rubrum ſive Gabianum, Ind. Med. An *Petroleum ruſum Schroderi*.

Petroleum flavum ſeu Italicum. Ind. Med.

The *Bitumen*, or *Petroleum Gabianum*, is eſteemed an antihyſteric; and alſo, good for the Tooth-ach:

It heats and dries, consists of fine Parts, is a Digestive and Resolvent, and beneficial to the nervous System. The *Naphtha* of *Dioscorides*, or *Petroleum* of the Shops, is a subtile, inflammable, mineral Oil, with a fragrant bituminous Smell, of different Colours, either white, yellow, red, or black. Different Names are given it by Authors: The *Babylonians* gave the Name of *Naphtha* to an Oil either black or white, which flowed from some Fountains near *Babylon*. It was likewise called, *The Oil of Medea*, because she is said to have burnt *Creon's* Daughter to Death, by anointing her with this Oil. It had the Name of *Petroleum*, because it distils from Rocks. By *Myrepsus* it is termed *Allicola*; by others, *The Oil of St. Barbarus* the Abbot, *the Oil of St. Catharine*, or *The holy Oil*. The Word *Naphtha* is said to come from a Word which signifies, to light, or kindle. There are few Countries in which this Oil is not to be found. In the Island of *Samos* a Kind of it is gathered, called by the Inhabitants by a Name which signifies *Oleum Terra*, and it is in great Esteem among the *Indians*. In *Italy*, near *Modena*, the Oil is gathered from Springs and Wells; and indeed this whole Dutchy abounds with it, especially a Place called *Frumetto*. The Inhabitants dig Wells to the Depth of thirty or forty Feet, till the oily Spring is found; and there it is always mixed with the Water. The Wells dug at the Foot of the Hill furnish a large Quantity of very red Oil; those near the Top, a white Oil, but in smaller Quantities. There is another Rock in the same Country near the *Apennine* Hills, where there is a perpetual Spring of Water, on which this Oil swims, of a yellow Colour, and in so great Quantities, that twice a Week they gather six Pounds at a Time. *Petroleum* is found also in *France*; and

particularly in *Britany*, near *Beriers*; and red Oil, mixed with Water, flows from the Crannies of some Rocks, which is collected with great Care, being no Way inferior to the rest in Virtue. There is another such Fountain near *Clermont*, in *Auvergne*. *Petroleum* easily takes Fire; and it is the Custom in many Places, to burn it in Lamps, instead of common Oil. It is plentifully stored with fine volatile Parts, which easily evaporate, and are so greedy of Fire, that if a lighted Torch, or any other flaming Body, be held in the Wells or Fountains of *Petroleum*, the exhaling *Effluvia* very often take Fire. It is difficultly mixed with Spirit of Wine. By Distillation, it yields an oily Liquor, something more pellucid than before; but it loses a great deal of its native Smell, and gives a more languid and fuliginous Flame. A small Quantity of a yellowish Magma remains at the Bottom of the Alembic; therefore it is evident, that *Petroleum* is not meliorated by Distillation. The best *Petroleum* is reckoned that which is fresh gathered, of a subtile, bituminous Smell, white, and pellucid; next to that is the yellow, then the red; but the black is accounted the most impure of all. *Dioscorides* commends it in Suffusions, and Dimness of the Eyes. The *Petroleum* of *Britany* is given, a few Drops at a time, with great Success, in what is called a Suffocation of the Uterus, and to kill Worms in Children. It is proper in a Suppression of the *Menses*, taken in the Quantity of twenty five Drops, or the Region of the *Pubes* being anointed with it. In a Palsy, accompanied with cold Pains in the nervous Parts, the Part affected is anointed with it. *Lustanus* commends the Use of it in stopping the Progress of a *Scirrhus*.

Pissasphaltus. See *Bitumen*.

Pisselaum Indicum, Offic. Barba-does Tar. This is a Sort of *Bitumen*, found

found floating upon the Surface of a Lake in *Barbadoes*, at the Bottom of which it probably transudes out of the Earth. It is of a blackish Colour inclinable to red, of a strong Smell, and of the Consistence of common Tar. It is a very good Pectoral, Stomachic, and Sudorific, and hence is good in Coughs; it is also sometimes apply'd to Burns, Scalds, and Inflammations, and is said to be a good Remedy for a Scald Head, and it is sometimes apply'd to the Soles of the Feet, and the Wrists, in order to cure an Ague. Doctor *Towne*, in his Treatise on the Diseases of the *West Indies* represents *Barbadoes Tar*, given in the Quantity of two Drams, three times a Day, as an excellent Medicine in the *Colica Pictonum*, or dry Belly-ach, after the Pain has been somewhat mitigated by previous Evacuations; and he further tells us, that upon the very first Appearance of a tingling Uneasiness along the Spine; the Fore-runner of a Palsy, generally succeeding this Distemper, an Embrocation of this Tar, with double distill'd Rum, well rub'd into the whole Length of the Spine, and into the Limbs, will prevent the impending Palsy, if any thing can.

Plumbago, Worm. *Molybdæna*, & *Plumbago scititia*, Offic. Plumbage. This is that Recrement, which, in the Purification of Gold and Silver with Lead, being concreted and calcin'd, adheres to the Furnace. Its superior Part resembles Litharge, its inferior Ashes, and its middle is a Substance compounded of both. It agrees in Virtues with Litharge, and is somewhat cold, tho' at the same Time, not possess'd of an astringent Quality.

Plumbum, Offic. *Plumbum Saturnus*, Mont. Exot. Lead. Both in its crude State, and in all its Preparations, Lead seems to be cooling, thickening, repelling, absorbing, and

contracting, so as to retard the Circulation of the Blood, hinder all the Secretions, and injure the Nerves, by causing Spasms, Convulsions, Tremblings, Difficulty of Breathing, and Suffocation. Whence it appears unfit for internal Use in any large Dose, or even in any at all; and accordingly its Medicinal Uses are principally external. A Plate of Lead is esteem'd a very good Application to *Ganglions*, a Species of Tumor, often appearing about the Wrists, and Backs of the Hand; and in Cancers, Lead and its Preparations, externally apply'd, are esteem'd excellent. I have known great Mischief done, by the internal Use of Sugar of Lead. *Cerussa*, or *Sandix*, White Lead, is prepared by suspending Plates of Lead, in such a Manner as to receive the Vapour of Vinegar, till it is corroded. This is only used externally, and agrees in Virtues with Litharge.

Plumbum nigrum, Offic. Black Lead, Wadt, Kello. This is accounted refrigerating, drying, and repellent; and is sometimes applied to stumous and cold cedematous Tumours.

Pyrites, Offic. Black Earth. It is a fat, dense, soft, black, astringent, and very acrimonious Substance, of the Taste of Vitriol. To these Marks, *Dioscorides* adds, that its Colour somewhat resembles the *Eretria Terra*, is cold to the Touch, and so glutinous as to adhere to the Tongue. The same Author says, that it has the same Virtues as the *Cimolia*, only is weaker: Some, he says, sell it for *Eretria Terra*.

Pompholyx, Nil Album, Offic. This is a Metallic Powder, of a white Colour, and lighter than Tutty; for as that, in the making of Bras, adheres to the Sides of the Furnace; this mounts up to the Top. It is very much esteem'd for Disorders of the Eyes, and in general agrees in Virtues with Tutty.

Porphyrites, Offic. Porphyry, or red Marble. This is a Species of Marble highly hard, and of a red Colour; it is brought to us from the Confines of *Egypt*, the Red Sea, and *Ethiopia*. It is thought to be possess'd of a lithontriptic Quality, and to agree in Virtues with the *Ophi-tes*.

Prasus, Offic. The Green Stone. It is green for the greatest Part of it, but is seldom without black, and sometimes white Spots. Many take it for the Mother of the Emerald, because this Gem is sometimes found in it. It agrees in Virtues with the Emerald, but in a lower Degree.

Pumex, Offic. The Pumice Stone. This is a porous and spongy Stone, full of small Cavities and Perforations, and found in *Germany*, whence it is transported to us. It is of a refrigerating, drying, and extenuating Quality. It gently cleanses Ulcers, and render Cicatrices full and seemly. In Mount *Vesuvius*, *Ætna*, and other burning Mountains, large Quantities of this Species of Stone are found with the Sulphur.

Pyrites, Offic. *Marchasita*. Fire Stones. They are found in almost all Mines, being the most fruitful Matrix of almost all Metals, Salts, and Sulphurs; for it is not purely a Stone, but seems to be the most fertile of all Minerals. There are great Varieties of it, with Respect to Colour, Figure, Mixture with Metals, Stones and other Fossils, for it enters in various Proportions the Composition of Iron, Lead, Tin, Silver, Copper, and Alum, and also that of black Flints, Pit-Coal, Lime-Stones, Chalk-Stones, and others. The *Pyrites*, whether crude or burnt, is of an heating and absterfivè Quality. It deterges such Things as darken the Sight, and concocts and dissolves Hardnesses. Made into a Plaster with Rosin, it represses Excreescencies of the Flesh, by some-

what of an heating, join'd with an astringent Quality.

Rubinus, *Carbunculus*, Offic. The Ruby. This is a glittering diaphonous Gem, of a red Colour, and Proof against the File; the most beautiful are found in the Island of *Ceylon*. As to its Virtues, it is said to be a Preservative against the Pestilence, expels Sadness, restrains lascivious and evil Thoughts, prevents frightful Dreams, exhilarates the Mind, and preserves the Body in Health; but all these Virtues are entirely superstitious.

Rubrica Fabrilis. Offic. Red Oker, Ruddle, Marking Stone. This is an earthy, ponderous, and intensely red Substance, found in many Parts of *England*, and is used in vulnerary and drying Plaisters.

Rubrica Sinopica, Offic. Earth of Sinope. This ought to be thick, heavy, and all of one Colour, resembling Liver, and when diluted with Water, it ought to diffuse itself therein. It is dug out of the Earth in *Cappadocia*, is esteemed drying, and is said to restrain a Diarrhæa.

Sal. Salt. Salt is defined by *Géoffroy*, to be a solid, friable, pellucid, and sapid Mineral Body, dissoluble in Water, fusible by Fire, and easily concrescible in Form of Crystals. This Definition agrees to alimentary Salt, Nitre, Vitriol, Alum, *Sal Ammoniac*, and Borax. But by Salt, common alimentary Salt is generally understood, which is of three Kinds, that is, first, fossile Salt, of which what is transparent, or pellucid like Crystal, is called *Sal Gem*. Secondly, Salt obtain'd by the Evaporation of Sea Water, which is brought about, either by the Heat of the Sun, or by means of Fire. Thirdly, Salt obtain'd by the Evaporation of the Water of Salt Springs by Fire. Fossile Salt is got in great Quantities, in many Parts of the World, particularly in the Moun-

Mountains of *Catalonia*, and at *Viliske* and *Bochna* near *Crackow* in *Poland*, where there are prodigious Mines of Salt. *Sal Gem* is principally used in Clysters, and Suppositories, in order to stimulate the Intestines to a Discharge of their Contents. In *Britany* in *France*, the Manner of making Sea Salt, is to dig shallow broad Trenches, which are lined with Clay. These being filled with Sea Water by the Tide, the Heat of the Sun evaporates the Water, and a large Proportion of Salt remains behind. In *Normandy* they make small Heaps of Sand upon the Shore, which imbibe the Sea Water; and the insipid Humidity being afterwards evaporated by the Heat of the Sun, the Salt remains among the Sand. To separate it, they first boil it in fresh Water, and then having strain'd off the *Lixivium*, containing now only a Solution of Salt in fresh Water, they boil it again with a gentle Heat in leaden Cauldrons, to a certain Degree of Thickness; then putting out the Fire, the Salt crystallizes. Salt is made from Salt Fountains also, by boiling the Water till the Humidity exhales; and whilst it is boiling, they mix with it either Gall, or Bullock's Blood, which makes the Salt form itself more easily into larger Lumps; for the Parts of the Gall or Blood, inviscate or intangle the bituminous or earthy Parts, which hinder the Concretion of the Salt, and are altogether thrown up as a Scum, or at least remain in the Strainers. But at *Droit-Wych* in *Cheeshire*, they add nothing to the Salt Water, during Cöction. Sea Salt prepared by the Heat of the Sun, is preferable to both, for culinary and officinal Uses. The Taste of it is well known; the Colour is greyish, because of the Particles of Earth mixed with it; but if it be dissolved and crystallized by a gentle

Heat, it is formed into very white cubical Grains. Salt made by boiling is white, but the Grains thereof are not exactly cubical, because of some Mixture of different Salts. By the *Analysis* of Salt, it appears that common Salt consists of a pure insipid Earth, an acid Spirit extremely volatile, and Water; and it is highly probable that this Earth, before it was united to the acid volatile Spirit, was of an alkaline Nature, and perhaps exactly the same with the *Natron* of the Ancients. What makes this the more likely is, that if any fixed alkaline Salt is impregnated with the acid Spirit of common Salt, a Salt will be formed very nearly the same with common Salt, which the Chymists call regenerated Salt. Common Salt has many very extraordinary Properties. (1) The smallest Crystals of common Salt are always of a cubic Figure, that is, the Figure of a Dye. (2) Upon the Application of Fire to it, it crackles. This Decrepitation or Crackling of Salt, seems to proceed from the Air contained in its Pores, which being rarify'd by the Fire, breaks its Prison and makes its Escape. (3) Spirit of Salt is the only Thing in Nature that will dissolve Gold; but not without being joined with the Spirit of Nitre. (4) Salt preserves all Vegetable and Animal Substances from Putrefaction, as also Water, and is itself incorruptible. This Property it entirely owes to the Acid it contains. (5) A greater Quantity of common Salt will be dissolved in a given Quantity of Water, than of any other Salt whatever; for six Ounces of common Salt may be dissolved in sixteen of Water, but it must be observed, that warm Water will dissolve more Salt than cold, and that in Proportion to the Heat of the Water. Thus Water in that Degree of Heat which makes it boil, dissolves more Salt than

than in any less Degree of Heat, insomuch, that as it grows cool, it will every Moment let fall more and more of the Salt which was dissolved in it, which will appear at the Bottom of the containing Vessel undissolved; and when the Water is so cold as to freeze, it will expel almost all the Salt, which will stick to the Bottom of the Ice in a solid Form. (6) Salt dissolved in Water, in a Heat equal to that of the Atmosphere, renders the Water considerably colder. And yet, (8) notwithstanding this Increase of Coldness, the Salt will keep the Water from freezing, insomuch that Water, wherein Salt is dissolved shall not freeze near so soon as pure Water: And hence we may observe, that Salt, when interposed between the small Particles of Water, has the Power of preventing their Association, that is, their Concretion into Ice; otherwise Salt, by increasing Cold, would promote freezing. (8) If Spirit of Salt is poured upon Ice reduced to Powder, it will increase the Coldness thereof to a surprising Degree; to a Degree much greater than ever was produced naturally, and in which every Animal must die. (9) Salt thrown upon burning Coals, greatly increases their Heat. This proceeds from the Air, Water, and Acid contained in the Body of the Salt; for the Air being forced out of the Salt by Heat, acts upon the Fuel like a Pair of Bellows; and that this will increase the Heat of the Fire is known to all Smiths; who, when they would make their Fires intensely hot, frequently sprinkle Water upon the burning Coals. (10) Salt made extremely dry, attracts the Moisture of the Air considerably, even, in the dryest Seasons, insomuch that it is a common Thing for People who deal in Salt, to buy it at the *Wyches* very dry, and so sell it a great many Miles distant, for

less per Hundred, than it cost them; yet are they considerable Gainers, because the same Quantity of Salt that weighs a Hundred at the *Wyches*, will be much heavier, after having imbibed the Moisture of the Air. The Virtues of Alimentary Salt are many, for first as it is an excellent Preservative against Putrefaction, whenever any Aliments of an *alcalescent* or *alkaline* Nature, or inclin'd to Putrefaction, are taken into the Stomach, in Quantities disproportion'd to the Powers of Digestion, Salt by preventing Putrefaction, will guard against those Mischiefs, which would arise from such a Putrefaction of the Aliments in the Stomach; that is, what is usually called a Surfeit; and by its *Stimulus*, will contribute much towards the carrying off the offending Matter, by Stool. On the other Hand, as Salt remarkably checks too great Fermentation, it will have a very good Effect, when fermentable Substances are taken into the Stomach in too large Quantities, and by their Fermentation excite Flatulencies, Spasms, and Distentions, and at the same time stimulates the alimentary Tube, to a Discharge of its Contents. It likewise calms the too great Ebullition of the Fluids of the Body; and, as it readily joins with volatile urinous Salts, and changes them into a *Sal Ammoniac*, it is fitted to soften the Acrimony of the Fluids, and promote the Depuration thereof by Urine. By its little Points it likewise stimulates gently the solid Parts, and thereby increases their oscillatory Motion, by which Means all the Functions of the Body are better perform'd. On these Foundations are built all the Virtues ascribed to Sea Salt, of drying, heating, deterging, digesting, opening, attenuating, increasing the Appetite, exciting to Venery, and of resisting Poisons and Putrefaction.

It is order'd in an *Apepsia*, want of Digestion, in want of Appetite, in Costiveness, and Obstructions of Urine. It has been observ'd, that those who live for any long Time upon Flesh or Fish, harden'd by Salt, have been extremely afflicted with the Scurvy, so that Salt is universally thought to cause the Scurvy, but late Observations have taught us, that Salt is so far from being concerned in the Generation of the Scurvy, that it is on the contrary an excellent Preservative against, and Cure for it, if taken in very considerable Quantities. Hence I should rather ascribe the scorbutic Complaints those are subject to, who live on salt Provisions, to the Hardness, and consequent Indigestibility of salted Aliments; for Salt hardens, for the very same Reason that it prevents Putrefaction. Besides, as no Flesh or Fish can be so perfectly salted, but that some Particles of it will be putrid if long kept, these putrid Particles, when mix'd with the Blood and Juices, may have a great Influence in exciting those Disorders, which we erroneously ascribe to Salt.

Sapphirus, Offic. The Sapphire. This is called by some the Gem of Gems, and is a hard Stone of a blue Colour, like that of the clear Sky. It comes nearest the Diamond in Splendor, Transparency, and Hardness, and is of two Kinds; one pale, called the Female sapphire; the other of a deeper blue, called the Male. There is a third Sort, likewise, which has no Colour at all, and is sometimes made to pass for a Diamond, but it is neither so hard, nor so brilliant. Sapphires are brought from different Parts of the *East-Indies*, and are thence called *Oriental*. The rest are found in *Silesia* and *Bohemia*, called *Occidental*. The Colour of Sapphire may be taken out by Fire, and then it looks like a Diamond; for which Reason *Geoffroy*

believes this Colour to come from a small Mixture of fine Sulphur of Copper. Many are the inestimable Qualities superstitiously ascrib'd to this Stone; but, besides these, we are told that it raises and exhilarates the Spirits, resists Poison, and cures Ulcers of the Intestines. *Schroder* informs us, that it is of a cold and dry Quality, astringent, consolidating, alexipharmic, cordial, and ophthalmic.

Sardus, *Sarda*, *Carneolus*, Offic. *Sardius Lapis*, Schrod. The Cornelian. It is a precious Stone, half transparent, and like the Washings of Flesh, or bloody Flesh; it is found in *Sardinia*. The Powder is prescribed to be drank in all manner of Hæmorrhages; being worn, it is superstitiously said to exhilarate the Heart, expel Fear, confer Boldness, avert Fascination, defend the Body against all manner of Poisons, and by a peculiar Property, to stop Bleeding in any Part of the Body; and ty'd about the Belly, to prevent Miscarriage.

Selenites, Offic. *CrySTALLUS Calcaria*, Mont. Exot. The Selenite. This is a rhomboidal, pellucid Fossil, divisible into thin *Laminee*. It is found in many Places, particularly near *Epsom Wells* in *Surry*. It is said to agree in Virtues with the *Testacea*, to be a Sweetner of the Blood, and to restrain Hæmorrhages. Externally it is used as a Cosmetic.

Silex, Offic. The Flint. According to *Schroder* Flints may be used internally for inciding tartarous Mucilage, resolving the Stone, and opening Obstructions. They are, also us'd as Dentrifices.

Smaragdus, Offic. The Smaragd, or Emerald. This is a green diaphanous, shining Gem, very pleasant to the Sight, but excessively brittle, which has given Occasion to many Stories. It is divided into oriental and occidental. The oriental is the best in all Respects. The other

other which comes from *Peru*, is not near so bright, and besides has generally some foul Spots. There is a third Kind of Emerald, or *Pseudo Smaragdus*, found in the Mountains of *Switzerland* and *Auvergne*, which is extremely tender, and of the palest green. Fragments of Emerald thrown upon a clear Fire, emit a fine Flame, and totally lose their Colour, which is a Proof sufficient that this Gem contains some Sulphur of Copper. Besides the superstitious Uses ascrib'd to it, it is said to stop Fluxes of all Kinds.

Smyris & *Smerillus*, Offic. Emery. It is a ferruginous, heavy, metallic, Substance, of a Colour inclining to black, and so hard, that Lapidaries use it in cutting and polishing their Diamonds, and Smiths to polish their Iron and Steel. *Emery* is of three Kinds; the common, which is blackish, and very much used, is found in many Parts of *Europe*, especially in an Island on the Coast of *Tuscany*, and in *Guernsey* in the *British* Channel. The second is a hard uneven Sort, of a reddish Colour, like Bloodstone or Oker, but does not stain the Hands. This is by some reckon'd among the Blood-stones. The third is of a blackish red Colour, streak'd with Gold colour'd Veins. It is found in the Gold Mines of *Peru*, and really contains Gold. This Kind is thought by Chymists to be a Gold Ore, or rather a Sort of immature or imperfect Gold; and therefore they esteem it very much, and extract a Tincture from it with Spirit of Sea Salt, with which they fix Mercury in an Instant, and give this Substance the Name of the miraculous Precipitate, because they fancy they shall at Length attain the true Art of making Gold, by means thereof. *Emery* is recommended by *Dioscorides* and *Galen* as a Dentrifice; but it corrodes the Teeth too much, and insensibly wears them away.

Sory. This is already taken Notice of under the Article *Chalcitis*.

Spodium Græcorum, *Nihil Gryseum*, Offic. Putty. This is the Ashes, or rather the metallic Flour, collected in the Furnaces and Shops of Copper Smiths, and differs from the *Pompholyx* in being more heavy, and not so pure. This is never given inwardly, but was sometimes applied externally. It is said to agree in Virtues with the *Pompholyx*.

Stannum. Offic. Tin. It is seldom used in Medicine internally, tho' its Virtues are highly extolled by some, particularly in Diseases of the Head, the Lungs and Uterus, the Falling Sickness, and the Bite of a mad Dog. It has been taken in crude Filings, to the Quantity of twenty Grains, or more, for some time, without Harm. It is reckon'd a good Remedy for the Worms.

Succinum & *Carabe*, Offic. Amber. We learn from *Frederic Hoffman*, that Amber is produced plentifully in *Prussia*, which is famous for being the proper and native Country of it. Tho' this Bitumen be generated in the Earth, there is Plenty of it found in the *Baltic* Sea, by the Shore of *Ludwic*, where it swims on the Water, and is carried along by the Waves, whence it is taken up in Nets. The Places most remarkable for Amber, are the Villages of *Fisch-hausen*, *Gross-ducstein*, *Wernichen*, and *Palmoniet*. Nor even is this Amber produced from the Sea, but in tempestuous Agitations of the Waters, is washed out of the Bowels of the Earth by the Waves, and at last thrown towards the Shores. Very properly then may this bituminous Body be reckon'd in the Class of Minerals; for it is a Product of the Earth, and is contained within its proper Veins, as well as Pit-Coal, or other Minerals. The Courses of these Veins were discovered some Years ago, by Order of King *Fre-*

deric, in the following Manner. In digging they first met with Sand, which being removed, the next Thing that offered, was a *Stratum* of white Clay; digging under this they opened a ligneous *Stratum*, that seemed to be compacted of old Wood, which, however, could be set on Flame. Under the Bottom of this *Stratum* in most Parts, they found Ore of Vitriol, which being exposed to the open Air, shot forth into Flowers of Vitriol, free from the least Tincture of Copper, and like those which proceed from the *Hessian* Iron Ore. At last digging still deeper, they came upon a *Stratum* of Sand; out of which in several Places, with convenient Instruments, they extracted Abundance of choice Amber. For it is a Thing worthy Observation, that Sand is usually the *Matrix* of Amber; so that where they find a great Bed of Sand in the Bosom of the Earth, they are not without Hopes of meeting with Amber. After the same Manner do they get it out of the Marcasite, near *Kustrin*; and in the Territories of *Stolpen* and *Dantzic*, it is also found in Lumps. Hence appears the Falsity of the old Fable, which would have us believe, that Amber is the Resin of Trees, which distils from their Bark into the Sea, and is there digested by the Heat of the Sun into a Body of that Kind. The Manner in which this Bitumen is generated, seems to be this: From that bituminous fossile Wood, which we just now mentioned, by the Accession of the subterranean Heat, there distils an Oil much like *Naphtha*, or *Petroleum*, which in penetrating the subjacent *Strata*, passes thro' the Vitriol Ores, where by mixing with its Acid, it is coagulated into a Substance of a resinous Form. The Reasonableness of this Opinion will appear from the following Considerations: 1. That Amber at its first Growth was liquid, may

be proved from its being often seen conglobated by Nature itself into a round Form. 2. Sometimes Insects of various Kinds stick and are included in Pieces of Amber, which they could never have been, if the Matter in which they are circumvented, had not been liquid. 3. We may conclude, that Amber is a Concretion of an Oil much like *Petroleum*, because Oil of Amber comes near to *Petroleum*, both in Smell and Virtue, and both of them are equally difficult to be dissolved by the most rectified Spirit. 4. *Charlton*, a very sagacious Observer of Nature, affirms, that Pieces of this Bitumen have been frequently found, which hold *Naphtha* and *Petroleum* included within them. 5. The acid Salt of Amber is of a very fixed Nature, and not inferior in Virtue to the Acid of Vitriol. 6. What will afford great Light in this Affair, is that physical Experiment, in which it is observed, that all distilled Oils, scarce one excepted, and amongst them aromatic Oils, being mixed with Oil of Vitriol, or pretty strong *Aqua fortis*, condense into a resiniform Mass, which, held to the Fire, is readily set on Flame. 7. Besides fossile Woods and Coals, by Distillation and Rectification, yield an Oil, very like Oil of Amber and *Petroleum*. 8. Lastly, The very Disposition of the *Strata*, which we have related, is a good Proof in this Matter. The first of these is ligneous, the second vitriolic, and the last composed of Sand, at the Bottom of which lies the Amber, scattered here and there in Bits. There is most Plenty of Amber along the Shore of the *Sudwic* Sea, especially when a tempestuous North Wind blows; for it seems probable, that the Sea penetrating by some secret Passages into those subterranean Places, where the Amber is nourished, by violent dashing and breakin

against them, separate from Time to Time Pieces of this Bitumen; and carry them away with it. Amber is of various Colours; the best is reckoned the pellucid, quite free from Spots, and which bears the highest Price. For this the *Chinese* give its Weight in Gold, and make their Idols of it after an elegant and master-like Manner. I lately saw, says *Hoffman*, a convex burning Speculum, made of this pellucid Amber, in the Manner of one made of Glass, which the *Landgrave of Hesse* keeps in his Cabinet of Curiosities. Next to the Pellucid is the White, after that the Yellow, and lastly, the Brown, which is the worst Amber of all. No less various are the Prices; for the larger and purer, so much the dearer are the Pieces; and the more pellucid they are, the more are they valued. They talk much of a black Sort of Amber, which yet is no where to be met with, and so is only believed upon common Report. Instead of this, they sell a black and solid Fossile, which is a kind of *Asphaltum*, and dug out of the Coal-Mines in *England*, and made into several Utensils for the Use of the Inhabitants. Many great Virtues are ascribed to Amber, especially when taken inwardly, in a cold State of the Brain, and in Catarrhs, in the Head-Ach, sleepy and convulsive Disorders, in a Suppression of the *Menses*, hysterical and hypochondriacal Affections, in a *Gonorrhœa*, *Fluor Albus*, and Hemorrhages. The Dose is from a Scruple to a Dram, in a poached Egg, or any other proper Vehicle externally. Amber is used as a Fumigation, in Cataplasms, and *Cucuphæ*, in Disorders of the Head or Brain. The Fumes of it, received at the Mouth, are often found successful in beginning Quinsies, a falling down of the *Uvula*, or Swelling of the Tonsils from a Catarrh.

Sulphur. The Sulphur of the

Shops, called *Σειβον* in *Greek*, because used in all expiatory and other sacred Rites, is a mineral, concreted Juice, solid, dry, friable, fusible by Fire, and very easily inflammable. The Flame it emits is blue, and the Smell of burning Sulphur is strong, subtil, acid, and very prejudicial to the Lungs. Sulphur is of various Kinds; it is in the first Place divided into *ἀπυρον*, or native Sulphur, which has never been exposed to the Fire; and *ἐμπυρόμενον*, or factitious Sulphur, prepared by Fire. It is either of a yellow, yellowish Ash, or light Colour, and either pure or impure in Substance. Native Sulphur is of two Kinds; one pellucid, and shining like Gold, and either of a citrine or greenish Colour. This is found about the Gold Mines in *Peru* in *Switzerland*, and many other Places. The other opaque, found either in hard, solid, shining, greenish, or yellow Lumps, or in Form of a clayish Glebe, of a light Ash Colour, or yellow. This Kind is dug near all the burning Mountains, near some sulphureous Springs, and in several other Places of *Europe* and *America*. Factitious Sulphur is prepared in different Manners. In some Places it is obtained by boiling of Water; and at *Buda* in *Hungary*, according to *Agricola*, it is evaporated with the Water of the Mineral Springs, and concretes in the Covering or Dome of these Fountains, like the Flower of Brimstone, and is gather'd from thence, once every Year, with great Care. It is, also extracted from a Sort of Ash-colour'd argillaceous Earth. Thus in some Places of *Italy*, there are Mines, out of which a fat, white, argillaceous Earth is dug, mixed with some blackish Veins; and this Earth being put into very capacious Vessels, and distill'd, the melted Sulphur runs out at the *Rostrum* of the Alembic into a Receiver, where it soon concretes into large Lumps. After

After the Distillation is over, a red Earth remains, which is thrown away as uselefs. Sulphur is also, often extracted from a Kind of *Pyrites*, especially near *Liege*, where there is a Kind of *Pyrites* like Lead Ore, which being dug up, is broken into small Pieces, and then thrown into very large Crucibles, or rather earthen Cucurbits of a quadrilateral Figure, with a narrow Orifice; These Vessels are placed in proper Furnaces, in an inclined Position, where the Sulphur contained in these Stones, being melted by the Fire, runs into leaden Vessels filled to a certain Height with Water, where it concretes immediately, the Substance which remains in the Cucurbit containing a large Portion of Vitriol. If by this first Operation, the Sulphur be not sufficiently pure and clean it is melted a second Time in Iron Vessels, and boiled with the Addition of a certain Quantity of Linseed Oil; afterwards it is made up, either in large Lumps, or is thrown into hollow Cylinders of Iron, rubbed over with Oil on the Inside, and so is formed into Rolls: Sulphur so prepared is called Brimstone, or common Sulphur, and is of two Kinds, yellow, or greenish, which last is preferred for the Extraction of Oils of Sulphurs from other Bodies, as containing the greatest Quantity of vitriolic Salt. *Dioscorides* informs us, that Sulphur is good in Coughs, when mixed with an Egg; and *Hippocrates* used it in hysterical Affections accompanied with Coughing, by way of Fumigation, sometimes alone, and sometimes mixed with other Substances. The internal Use of Sulphur is recommended by Physicians in Diseases of the Lungs, of which it is, by way of Eminence, termed the Balm; because it promotes Expectoration, and clears and strengthens that Organ, and is therefore very beneficial in a *Phthisis*, *Asthma*, and

Catarrh. It has in all Ages been a famous Medicine in cutaneous Diseases, Scabs and *Psoe*, used inwardly or outwardly. Externally apply'd it dissolves hard Tumors, ripens and digests Buboës; but no Medicine prepared with Sulphur is thought to be agreeable to Women with Child, because it is subject to cause Abortion. Inwardly taken it is laxative, and promotes insensible Perspiration, as may be perceived by the sulphureous Smell of such Persons as have taken it, and by the brownish or black Colour which it gives to the Gold or Silver they carry about them. It is therefore very quickly and readily diffused through the whole Body, and by its balsamic Parts, it blunts and entangles the acrid Salts, with which the Fluids abound in these Diseases; and by its native, mild, soft, and oily Qualities, it readily cures small Ulcers in the Lungs and Skin. Though Sulphur may be given inwardly, even in a gross Powder, yet it is seldom order'd without some Preparation. It may be purify'd different Ways; some put it into Water with melted Wax, which swims at the Top while the Sulphur falls to the Bottom; and by repeating this Mixture till the Sulphur begins to acquire a red Colour, it is then thought to be more defecated. Some boil it in Water for several Days, changing the Water every now and then, and afterwards they set it for two Hours in hot Smoke, that some Fumes may exhale, and the remaining pale yellowish Sulphur they judge to be very pure. Others make Milks and Magisteries of Sulphur, which they think much preferable to common Sulphur; but all these Preparations either change the true Nature of Sulphur, or else are of no Effect at all. The best Way to purify it, is by Sublimation, or the Reduction of it to Flowers, by which common Me-

thod it is freed from the earthy or metallic Parts that may have been mixed with it. If taken crude into the Body, by small Doses frequently repeated, it wonderfully cleanses the first Passages, at length purges strongly, and then effectually cures certain cutaneous Diseases, and such as proceed from Worms, or Mercurial Fumes.

Talcum, Offic. Talc. This is a shining fissile Stone, easily divisible into very thin pellucid *Laminae*, a little flexible. In the Fire it does not melt, is not calcin'd, nor does it lose its Colour. Some Talc is of a Silver Colour, called by the Chymists *Argyrolithos*; some yellow, called solar Talc; some greenish, and some black. That which is brought from *Venice* is reputed the best, and is of a light green Colour. This Stone is seldom used in Physic, but it is very much in Vogue as a Cosmetic, the Ladies being of Opinion, that it cleanses and whitens the Skin. Some Chymists have endeavour'd, by the the Oil of Talc, to fix Quicksilver, and afterwards convert it into Silver, but they never consider'd, that what they called Oil of Talc, was intirely the Product of the other Substances mixed with it.

Terra Japonica, Offic. Japan Earth. This is a gummy, indurated Substance of a reddish Colour, inclining to black; of an astringent and austere Taste at first, but afterwards sweet and grateful, and void of Smell. There are two Sorts of it; one purer, which, slightly tasted, melts, as it were, on the Tongue; the other harder, and less pure, and consequently of but little Use; and this perhaps led *Schroder* into an Error to mistake it for an Earth. The Learned are not agreed about the exotic Drug called *Terra Japonica*, and *Catechu*, or *Caetchu*: Some, who take it for a true and genuine Species of Earth, as its Name imports, rank it among Minerals; others will have it to be a compound Substance, participating of a vitriolic Nature; and others there are, who, and indeed rightly, reckon it in the Class of Vegetable Substances, and take it for an inspissated Juice. This *Catechu* is easily dissolved in Water, incorporates with it, and communicates to it a red Tincture; as do many other Vegetable inspissated Juices and Extracts: Besides, it is not separated by Filtration, as Earths usually are; but passes the Filtre with the Water, and is, moreover, by Calcination, perfectly converted into Ashes, which Earths are not. That it participates not of a vitriolic Nature, will abundantly appear from the following Experiments: The first is, that no vitriolic Salt can be separated from it. Secondly, The Mixture of an Alkali with it excites or produces not the least Effervescence or Precipitation. And lastly, a Solution of the same, with the Addition of any Kind of vitriolic Substance becomes an Ink. *Garcias*, and others after him, will have the *Catechu* to be the *Lycium* of *Dioscorides*; but are contradicted by *Clusius* and *Veslingius*, because the Trees which yield the *Lycium* and the *Catechu*, are different in the Shape and Size of their Leaves and Fruits. Some assert it to be the inspissated Juice or Extract of the Fruit called *Anacardium Occidentale*, because of the seeming Affinity of the Names, that Fruit being called *Cajou*, and *Catxu*. *Cleyer* affirms it to be the Extract of the Oriental *Acacia*, a Plant much like the Tamarind. *Paulus Ammannus* says, it is an artificial Composition, prepared of an Extract of Indian Liquorice, *Indian Calamus Aromaticus*, and the Juice of the *Areca*, which gives it its purple Colour. And lastly, *J. Otto Helbigius*, a Person very well skill'd in the *East Indian* Simples, informs us, that it is extracted from a Kind

Kind of small, hard, resinous, astringent Fruit, which hangs in a sort of Clusters. This Fruit, he says, with the Leaves of Betel, and Lime, are used over all *India*, in chewing, for cleansing the Mouth; and is no other than what the Inhabitants of *Java* call *Fausel*, and those of *Malaya Pynang*. *Dale* declares himself of this last Opinion. It is astringent, corroborates the Stomach; removes a *Nausea*, excites an Appetite; represses Vomiting, and stops Fluxes of the Belly, of the *Menses*, and *Hæmorrhages*. But its most remarkable Efficacy consists in mitigating and curing a Cough, for which it is very effectual, if suffer'd to dissolve gradually in the Mouth, and swallow'd with the *Saliva*.

Terra Lemnia, Offic. Earth of Lemnos. This is a fat, viscid, slippery Clay, of a pale red Colour. It is brought to us in little Cakes or Troches, marked with different Characters, each weighing about four Drams. It has its Name from the Island of *Lemnos*, where it is dug; and it is not a little surprising to find how much this Earth has been celebrated in all Ages. Even in the Time of *Homer* and *Herodotus*, a great many very solemn Rites were observed in digging it. In the Days of *Dioscorides*, it was made up with the Blood of a She-Goat, newly killed; and the Priests of *Venus* stamped it with proper Images. In *Galen's* Time the Goat's Blood was omitted, but many other superstitious Ceremonies still remained; which, when *Petrus Bellonius* was at *Lemnos*, were laid aside, and others substituted in their Place. It is dug, says that Author, only on the sixth Day of *August*; as much being then taken out, as is supposed to be sufficient for a whole Year. When the Vein is opened, the *Greek* Priests rehearse some Forms of Prayer, at which all the considerable Inhabitants of the Island,

both *Greeks* and *Turks*, are present. The Vein being afterwards closed, and cover'd with common Earth, the Inhabitants are forbid, under the severest Penalties, to open it any more during that Year. The greatest Part of this Earth is sent to *Constantinople* to the *Grand Signior*, with whose Seal it is marked; the rest is sold to Merchants by the Governor of the Island, sometimes with, and sometimes without his Seal upon it. *Bellonius* remarks, that at *Constantinople* they have the Art of Counterfeiting it so dexterously, that the false Earth can hardly be distinguished from the true. That *Lemnian* Earth is reckoned the best, which, when bruised between the Fingers, or held in the Mouth, appears most like Fat, and contains least Sand. The Antients have said much about the Vertues of this Earth, but there is some Room to think, that the Reputation it had among them, was more owing to the superstitious Ceremonies observed about it, than to its intrinsic Qualities. *Dioscorides* recommends it as an Antidote against Poison and Dysenteries. *Galen* says, that, when outwardly applied, it heals all fresh Wounds; and *Fernelius* is of Opinion, that whether applied outwardly or taken inwardly, it stops all Fluxes of Blood. Some have celebrated its alexipharmic Qualities in all pestilential and contagious Distempers; but many of the Moderns think it to be a mere alkaline Earth, endued with no other Quality but that of absorbing Acids. This, however must be a Mistake; because no Earth of this Kind raises an Effervescence with Acids; and it appears by its Analysis not to be altogether destitute of the Virtues attributed to it by the Antients. It yields a small Quantity of volatile urinous Salt, and of a bituminous Oil, and of a Salt not much different from Sea-salt; whence we may conclude, that this Earth is impregnated

pregnated with a Kind of Sal Ammoniac, mixed with a bituminous Oil, by which the Action of Acids upon it is prevented; and that its Virtues must be, in some Degree, alexipharmic, diaphoretic, detergent, and vulnerary. This sealed Earth needs no other Preparation than to be finely powdered, or dissolved in a proper Liquor. In Dysenteries, Ulcers of the Intestines, and Hæmorrhages; it may be administered in Draughts or Boluses. In external Applications, this Earth is often joined with Bole. The Inconveniencies that may arise from using this Earth too long, or in too great Quantities, are common to it, with all the other absorbent Earths. They load the Stomach, by adhering closely to, or plaistering its inner Surface, which causes a very disagreeable Sensation; and, by closing the Orifices of the Glands of the Stomach and Intestines, they hinder Digestion, and may occasion the Fluids, which ought to be excreted there, to be carried to other Parts of the Body; from which Causes many Disorders may follow. The Way to prevent Accidents of these Kinds is, to give these Absorbents in small Quantities, diluted with much Liquor, and diligently to observe the Effects they produce.

Terra Lemnia alba, Offic. White Earth of Lemnos. It is a little, tenacious and lubricous from its Fatness; whence it adheres to the Tongue, but without Mordacity: It is digged in the Island of Lemnos. As to its Virtues, it stops an Hæmorrhage from the Uterus, and the menstrual Flux; resists Poisons, and malignant Diseases; and is good for the Bite of a mad Dog.

Terra Melitea, Offic. *Terra sigillata Sancti Pauli vulgo*. Earth of Malta. This is a cretaceous ponderous Substance, of a whitish Colour, and astringent Taste. It is brought from Malta in small Cakes, sealed

with the Effigies of St. Paul, with a Viper. It is said to agree in Virtues with Chalk. The Earth of Malta is said to have received a Benediction from St. Paul, when shipwreck'd upon that Island; and hence alexipharmic Virtues are attributed to it, which it is not likely to be possessed of on that Account.

Terra Noceriana, Mont. Exot. Earth of Nocera. It is a white Kind of Earth found about Nocera, of an alexipharmic Quality, and of great Efficacy in malignant Fevers, and Heat of Urine. It is an Astringent, and an Edulcorant, or Sweetner.

Terra Portugallica. Earth of Portugal. It is a redish Earth, inclining to a Rose Colour, and of a styptic and astringent Quality, so as to adhere to the Tongue; it is made up into little Cakes, with the Figure of a Rose stamp'd upon them. This Earth is said to be good for Fluxes of the Belly.

Terra Samia, Offic. Earth of Samos. This is an argillaceous, sebaceous, pinguious, and ponderous Substance of a white or pale Colour, and astringent Taste. It was brought from the Island of Samos, and is recommended by Dioscorides for checking Fluxes. It agrees in Virtues with the Lemnian Earth.

Terra Sicula; *Bezoardicum minerale*, Mont. Ind. Exot. *Lapis Bezoar fossilis*, Geoff. Prælect. Mineral Bezoar, or Sicilian Earth. This is a Native of the Island of Sicily. It is esteem'd Alexipharmic, Sweetening, and Opening; and is recommended by Aldrovandus in malignant Fevers.

Terra Sigillata alba & rubra magni Ducis, Mont. Exot. White and red sealed Earth of Tuscany. It is said to be an Astringent, and an Edulcorant, or Sweetner.

Terra sigillata Livonica, Offic. sealed Earth of Livonia. This Earth is redder than the *Terra Silesiaca*, and

and is very astringent; whence it is recommended in Dysenteries, *Diarrhæas*, and other Kinds of Fluxes.

Terra Silesiaca, Offic. *Terra Sigillata vulgo*, *ſive Terra Strigenſis*. *Terra ſigillata Germanica lutea Strigenſis dicta*, Schrod. *Bolus Sileſianus*, Calc. Muſ. Sealed Earth of *Striga*. It is of a luteous Colour, inclining to a bright yellow; fat, viſcous; and runs abroad like Butter in Water, or in the Mouth. It is generated in the Gold Mines of *Mons Acutus*, or St. George, near *Strigonium*, a Town in the Dutchy of *Sawidnitz*, among very hard Rocks. Hence it is digged, and prepared with the greateſt Care, by Direction of the Magiſtrates, and reduced into little orbicular Maſſes, which are impreſſed with a Seal, having the Figure of the different Prominences of the Mountain, two Croſs-Keys, a Buckler, and on the Right a Star. Under the Mountains are the Words, *Terra ſigillata montis acuti*. *Wormius* mentions this Earth under the Diſtinction of red coloured Earth. It is effectual in an *Hæmoptoe*, *Phthiſis*, Ulcers of the Lungs, and Hæmorrhages of all Kinds; and repreſſes a Dyſentery, and all other Fluxes of the Belly.

Terra Tripolitana & *Tripolis*, Offic. Engliſh Oker. This is an earthy Subſtance, eaſily friable, of a yellowiſh Colour, and of an aſtringent Taſte. It is eſteemed drying. Its principal Uſe is to mix with Salts in Diſtillation, in order to keep them from melting.

Terra Turcica, Offic. *Turkey Earth*. The Inſide of the Maſs is all of an Aſh Colour, the Outſide red, anſwering in no Reſpect to the *Terra Lemnia*, tho' it is ſuppoſed to have the ſame Virtues, and is commonly ſold for *Terra Lemnia*.

Terra vitriolata Sigillanda. M. Hoffm. Flor. Altdorff. This Earth is taken out of a ſubterraneous Place, called *Dak Seiklock*, in the Territory

of *Welden*. It is like the *Terra Sileſiaca*, and has been found by a Multitude of Experiments to be of the ſame Virtue in malignant Fevers, as we are aſſured by *C. Hoffman*.

Turchoſa, Aldrov. Muſ. Metall. *Turchois*, Offic. The *Turquois*. The Virtues of this Stone, are ſaid to be great in Falls; a memorable Inſtance of which is related by *Boetius* concerning himſelf. *Scylla* would have it to be a Sort of Fiſh's Tooth. *Woodward* is of Opinion, that the Stones which the Jewellers call *Turquois* are only Fragments of Bones, ting'd with a blueiſh Colour in the Veins of Copper Mines, where they are found.

Tutia, Offic. *Cadmia Fornacia*, Geoff. Prælect. *Tutty*. This is a Recrement of Calamine melted with Copper, and not of Copper alone, as was that of the Antients. The official *Tutty* therefore may be defined a Sublimation of the Calamine, from melting Copper to the upper Part or Roof of the Furnace, where it concretes round Iron Rods placed there, into a hard Cruſt, which is afterwards beat off into Pieces, like the Bark of Trees of a yellowiſh Colour, ſmooth on the Inſide, and ſonorous, of a blueiſh Aſh Colour on the Outſide, and powder'd, as it were, with very ſmall Grains of the ſame Subſtance. This is perhaps the ſame with the *Tutty* of the *Arabians*; for *Serapion* deſcribes a Kind of *Tutty*, which is produc'd and collected in the Furnaces in which Copper is turn'd to a yellow Colour. But it is not certain, whether they might not likewise mean the Calamine itſelf by that Word. *Tutty* is reckon'd among the principal ophthalmic Medicines. It deterges and dries without Acrimony, and is therefore preſcribed with Succeſs in Ulcers of the *Cornea*, *Adnata*, and Eyelids; and likewise in Itchings of the Eyes, inveterate *Ophthalmias*,
R r 3

and to stop an involuntary Flux of Tears, and fistulous Humours. It is seldom used without Preparation, which consists in heating it red hot, and then quenching it three or four Times in Rose Water, and afterwards levigating it according to Art on a Marble or Porphyry.

Vitriolum, Offic. Vitriol. Some derive the Name Vitriol from *Vitrum*, because it has the Colour and Transparency of Glass; in Greek it is named *Χαλκανθον*, as if it were an Efflorescence of Brass, and in Latin, *Atramentum Sutorium*, because it is used in blacking Leather. Vitriol is either natural or factitious. The former is found in Crystals, or *Striae*, sticking to the Roofs of Mines; and the latter is made by boiling the vitriolic Veins of some mineral Ores in Water, and afterwards letting them stand in the Cold to crystalize; or by corrupting and fermenting the *Pyrites*, or Marcasite, and then mixing it with Water, from which Vitriol is afterwards obtained by Coction and Crystallization. This Way of making Vitriol seems to have been unknown to the Greeks. White Vitriol is brought from Germany, made up in Loaves, like Sugar, and is of a sweetish astringent Taste: They are mistaken who think that white Vitriol of *Goslar*, is only the Green, calcined by the greatest Degree of Fire, for it is found in proper Mines, like a downy Efflorescence, which being dissolved in Water, to a due Consistence, is afterwards boiled till it concretes into a white Mass, like Sugar. Sometimes little Pieces of it are found in the same Mines, transparent like Crystal. This Vitriol contains an imperfect Iron Ore, or perhaps, an Iron Ore mixed with Calamine or Lead. Blue Vitriol is dry to the Touch, and concremented into blue Crystals, like Sapphires, of a Rhomboidal Figure, flattened, and consisting of ten Sides. It is brought

from several Places, especially from Hungary and Cyprus; and its beautiful blue Colour is owing to the Copper which it contains. The Taste of it is very acrid and austere. Green Vitriol has different Names, from the different Places where it is found; as *Roman*, *Swedish*, *English*, and *French*. It contains a large Portion of Iron, from whence its green Colour is derived: It is kept in the Shops, either in large rhomboidal Crystals, or in Heaps of small crystal Grains, sometimes a little unctuous, and sticking to the Hands. It is of an acid styptic Taste; and indeed it cannot well be supposed to have any other, Vitriol being an acid Salt, which having corroded Iron or Brass coagulates with them, and concretes into a pellucid Mass, either of a green or blue Colour, according to the Metal which it has dissolved. Some Authors mention likewise red Vitriol; but *Geoffroy* says, he has not been able to learn what it is. Vitriol is obtained by various Arts from Waters, Earths, vitriolic Stones, and especially from the *Pyrites*. In *Galen's* Time, blue Vitriol was made in Cyprus, by the Heat of the Sun exhaling the Humidity of a vitriolic Water. In some Places of Hungary, the same Vitriol is now made by boiling and evaporating a Water of the same Kind; and the green Vitriol is made by a Method not much different, in other Places of Germany. In some Places it is made by frequent Ablutions of an Ash-coloured Earth, marked with Spots of different Colours; some of which look like the Rust of Iron, others like Verdigrise, with a strong sulphureous Smell, and an unpleasant bitter Taste: This Vitriol is therefore composed of a Mixture of Iron and Copper; and accordingly its Colour is a Mixture of Blue and Green. In England, green Vitriol is made from the *Pyrites*, which are heavy dense Stones,

Stones, of a dark Colour on the Outside, but their inner Surface is radiated from the Centre to the Circumference; the Rays shining like *Bath Metal*. See *Pyrites*. A Solution of Vitriol turns the Tincture of *Heliotropium* into a faint purple Colour, coagulates Milk, turns Syrup of Violets to a greenish Colour, but does not change a Solution of Corrosive Sublimate. When it is mixed with a Solution of Salt of Tartar, or Lime Water, the Colour becomes a little yellowish, and it communicates a black, or dark-purple Tincture to the Infusion of Galls, which indeed is peculiar to Vitriol. By Distillation an acid Spirit is obtained from Vitriol, by a very great Degree of Fire, called by the Name of the *Spirit or Oil of Vitriol*, which turns the Tincture of *Heliotropium*, and Syrup of Violets, to the Colour of Fire, coagulates Milk and Blood, and raises a strong Fermentation and Heat with any alkaline Salt. The Oil of Vitriol, or that strong acid Liquor obtained from it by Distillation, when mixed with common Water, raises an intense Heat; with *Sal Ammoniac* it raises an Effervescence, but generates Cold, tho' the Fumes that arise feel hot. After this Distillation is over, a blackish or red Earth remains in the Retort, called *Colcothar*, and it is the *Calx* or *Crocus* of either Iron or Copper, according to the Nature of the Vitriol that hath been distilled. From this Process it is evident, that Vitriol is composed of an acid Salt, subdued by metallic Parts; which is, also, easily demonstrated from the artificial Ways of producing Vitriol. If Spirit of Vitriol be poured on the Filings of Iron, a very good Vitriol is obtained; and if Copper Plates, stratified with Sulphur, be calcined in a Crucible, the Water in which this *Calx* is made to boil for some Time, if evaporated, will leave behind a true

blue Vitriol. The Virtues ascribed by Chymists to Vitriol are past Belief; neither do we find the Event to answer their Promises. *Dioscorides* mentions an emetic Quality of it; and says, that dissolved in Water, it is good against Worms in the Intestines, and after eating poisonous *Fungi*. He tells us farther, that this Solution snuffed up the Nose, purges the Head, and reckons it among the astringent, heating, and caustic Medicines. *Pliny* commends it in Diseases of the Eyes, Fluxes of the Blood, and for the Cure of Ulcers, and *Galen* made Use of it in *Collyriums*. At present it is used as an Emetic, Vermifuge, Styptic, Detergent, and Antiphlogistic; but is seldom given inwardly without Preparation. Externally, white Vitriol is principally used in Collyriums, to allay an Inflammation of the Eyes, and stop their Running. Powder of blue Vitriol is applied to the Extremities of the bleeding Vessels in Wounds, and stops the Bleeding, by cauterizing the Vessels, and coagulating the Blood. Among the Preparations of Vitriol, the first is Purification, called *Gilla* of Vitriol, in which white Vitriol is mostly made use of, it is purified by Solutions, straining and drying, twice or thrice repeated; and then being taken, from a Scruple to a Dram at a Dose, in a proper Vehicle, it will excite Vomiting: This is recommended by *Paracelsus*, and other Chymists, as an excellent Emetic, as not only cleansing the Stomach by gentle vomiting, but, also, strengthening both Stomach and Intestines afterward, by its Astringency: Whence it is given with Success in Diarrhæas and Dysenteries. This *Gilla* was very much in Use before antimonial Emetics were known, and the Use of *Ipecacuanha* was discovered, but it is now almost left off.

Unicornu fossile, Offic. *Lapis Arabeus*,
R r 4

bicus, Casalp. The Unicorn-Stone. This is a stony Substance, resembling in Colour, Smoothness, and Shape, the Horns, Teeth, and Bones of Animals. It is made up of an outer, hard Part, of an yellowish, blackish, or Ash-Colour, and a soft, friable, compact medullary Part, without Pores, of an astringent and drying Quality, sticking very close to the Tongue, and sometimes of an

agreeable Smell. It is said to agree in Virtues with the *Terra Lemnia*, and is recommended against malignant Distempers; it resembles, also, a Unicorn's Horn, particularly in resisting Poison, and curing the convulsive Motions of Infants; and is often used in the Small-Pox, and Measles. Of this Substance calcined, is prepared the factitious Turquoise.

CHAP. IV.

Articles not properly reducible under the former Classes.

SAL Ammoniacum. Sal Ammoniac.

It is not at present well known what the *Sal Ammoniac*, or *Sal Cyreniacus* of the Antients was. It is said to have been generated in the Sands by the Urine of Camels; for when Camels or other Animals deposite their Urine in the barren Sands of *Africa*, the Heat of the Sun during the Day, makes all the Humidity evaporate; in the Night, the Acid of the Air is attracted by the alkaline urinous Salt, till it is perfectly neutraliz'd, and forms the antient *Sal Ammoniac*, or *Sal Cyreniacus*, which would be wasted in Vegetation, if the Soil was not utterly barren. In Imitation of this, all the different Sorts of *Sal Ammoniac* are made, by uniting an urinous Salt with some Sort of Acid. The Matter of the *Sal Ammoniac* made in *Egypt* is pure Soot, and nothing else, but such a Soot as is swept from Chimnies where they burn Turfs of the Dung of Animals fed with Straw, which is the common Fuel in this Country, where they have no Wood. These Turfs, which are impregnated with alkaline and urinous Salts, communicate to the Soot certain Properties which it could not

be expected to receive from the Smoke of Wood and Coal; and yet are absolutely necessary for the Production of *Sal Ammoniac*. The Vessels which contain the Matter are exactly of the Figure of Bombs. They are great round glass Bottles, a Foot and a half in Diameter, with a Neck two Fingers in Height. They are covered over these Bottles with a fat Earth, and fill them with Soot to four Fingers short of their Neck, which continues void and open. They contain each about forty Pounds of Soot, which at the End of the Operation yield six Pounds of *Sal Ammoniac*. Soot of an extraordinary Quality affords above six Pounds; what is worst, affords least. The Furnaces are built like our common Ovens, except that their Vaults open with four Clifts in a Row lengthwise; upon each Clift are four Bottles, which are placed in such a Manner, that the Bottom of the Bottle being sunk in, and exposed to the Action of its Flame, only the Neck of the Bottle remains exposed to the Air; the Rest of the Clift is stopped up, and well cemented. Every Furnace contains sixteen Bottles; and

and every great Laboratory consists of eight Furnaces, disposed in two Rooms, so that it employs at once a hundred and twenty-eight Bottles. In each Furnace, for three Days and Nights together, there is kept up a constant Fire made of the Dung of Animals mixed with Straw. The first Day the gross Phlegm of the Soot exhales in a thick Fume by the open Neck of the Bottle. The second, the acid and alkaline Salts, being sublimed, associate toward the Top of the Bottle, where they touch the Neck, and, uniting, coagulate. The third Day the Coagulation continues, depurates, and is perfected. In the mean Time the Master makes a little Hole in the Side of each Bottle, a little below the Neck, to see if the Matter be bak'd enough, and if there be nothing more to be sublimed. After he has made his Observations, he stops the Hole carefully with the fat Earth, and opens it from time to time. At last, when the Work is brought to the Point at which it ought to stand, he takes away the Fire, breaks the Bottles, shakes off the Ashes from the Bottom, and takes the round, white, and transparent Mass, of the Thickness of three or four Fingers; that adheres to the Neck, which is what they call *Sal Ammoniac*. In two Towns of *Delta*, near one another, a League from the City of *Munfoure*, there are twenty-five great Laboratories, and some small Ones, which make every Year fifteen hundred or two thousand Quintals [Hundreds] of *Sal Ammoniac*. In all *Egypt* besides there are but three Laboratories more, two of which are also at *Delta*, and one in *Grand Cairo*, which do not produce above twenty or thirty Quintals of this Salt. There is also a Sort of *Sal Ammoniac* made in the *East-Indies*, and thence imported into *Europe*. This Sort is made in the Figure of a Sugar Loaf,

with the Top cut off; the largest of these Loaves are nine Inches in Diameter at the Base, and three Inches and a quarter at the Top, and eleven Inches and an half in height. To make a Comparison between the *Indian* and *Egyptian Sal Ammoniac*, it appears, that they are of the same Composition, and as to their Qualities, and the Uses to which they are applied, there can be no great Difference between them. That of the *Indies* has the Advantage of being pretty clean from Impurities on the Surface, and having only its Top of worse Alloy than the Rest; so that upon the whole Mass there must be less Waste than in the *Egyptian* Loaves, which are charged with more Impurities in proportion to their Bigness. These are the Accounts we have of the Origins of the different Species of *Sal Ammoniac*. But it is scarcely credible, that so prodigious a Quantity of Soot, as to make fifteen hundred or two thousand Quintals a Year, can be furnished by one Country, especially *Egypt*, which is a very warm Country, and where they only use Fires for culinary Uses and at their Bagnios. We must therefore surely conclude, that the *Egyptians*, who make *Sal Ammoniac*, have had the Address to keep their Method of doing it a Secret from the *Europeans*; and that they make Use of some other Ingredients besides Soot. Very good *Sal Ammoniac* is certainly to be made without any Soot at all, for I am well informed, that at the *Sal Ammoniac* Works carried on some Years ago at *Newcastle*, the Rule for making it was thus: Take of the *Bittern*, that is, the Liquor which drains from common Salt whilst making, one Gallon, and of Urine, three Gallons; let them stand together forty-eight Hours to effervesce, and subside; then draw off the clear Liquor, and evaporate in leaden Vessels to Crystallization. Sublime these

Crystals,

Cryſtals, when dry, in proper Veſſels, and a very good Sal Ammoniac will be produced. I am farther informed, that from one hundred Weight of Salt made from the *Bittern*, commonly fold under the Name of *Epfom Salt*, and three Hogſheads of Urine, fifty-fix Pounds of Sal Ammoniac may be procured. But it muſt be remarked, that Sal Ammoniac is a very different Subſtance from moſt of the Preparations made from it; for when alkaline Salts are mixed with the crude Sal Ammoniac, they abſorb the Acid, which renders the Sal Ammoniac neutral; and then the volatile urinous Salts, ſet free from the Acid riſe in Diſtillation. *Boerhaave's* Character of Sal Ammoniac is, that it preſerves all animal Subſtances from Putrefaction, and its Brine penetrates into the moſt intimate Parts, and is the nobleſt Aperient, Attenuant, Reſolvent, Stimulant, Errhine, Sternutatory, Diaphoretic, Sudorific, Antifeptic, and Diuretic. Sal Ammoniac is not employed ſo much in Medicine, as it deſerves to be; for as it is abſolutely a neutral Salt, conſiſting of an acid and a volatile alkaline Salt, it is extremely penetrating and reſolvent, uſed either externally, or internally, and is a noble Deobſtruent, and Cooler, where ſuch Medicines are required.

Sal Catharticum amarum. Epſom Salt, or bitter purging Salt. Mr. *Brown*, in the Philoſophical Tranſactions, gives us the following Account of this Salt. This Salt, ſays he, was firſt made by Dr. *Grew*, by evaporating the *Epſom Waters*. Some Years after, ſeveral other bitter purging Springs were found in different Counties, and Salts in ſmail Quantities were boiled up from them, but from no Place, nor all the Places put together, in ſuch large Quantities, as from the Springs on one Side of *Shooter's Hill* in *Kent*, about the

Year 1700, which were then in the Poſſeſſion of thoſe two Chymiſts, Mr. *George*, and Mr. *Francis Moul*, and where they made ſuch a large Apparatus for evaporating the Water that they ſometimes boiled down 200 Barrels in a Week, from which in a dry Season, and when the Land Waters did not get into their Drains, they have obtained two hundred and twenty four Pounds of Salt. After theſe Works had gone on ſome time, Dr. *Hoy* found out a more expeditious Way of making a purging Salt, ſo nearly reſembling that from the purging Springs, in all its Properties, that it ſoon paſſed on the World for the other, and continued ſo to do. The great Conſumption of theſe Salts (which went then only by the Name of *Epſom Salts*) as well at Home as Abroad, engaged ſome of our own Phyſicians, many Years before M. *Boulduc* took Notice of it, to ſuſpect that even what was made at *Shooter's Hill* was ſpurious, and receiv'd an Addition of ſomething to increaſe the Quantity. But theſe Suſpicions, ſays he, I dare poſitively affirm, were entirely groundleſs, as to the Salts made there, and readily believe the ſame of any other Places, where the Spring Waters were boiled down for Salt. But upon a Conſideration, that there were greater Quantities of this Salt conſumed than all the Places where the Waters were boiled could produce, which was the real Fact at that time of Day, there was ſufficient Room to ſuſpect that ſome of them were not genuine, as appeared to be true ſome time after. For the Secret which was then in a few Hands, of making theſe Salts cheap, gave thoſe who had it, an Opportunity of underſelling thoſe who made it from the Waters, and in a Year or two, render'd them incapable of making it to any Advantage: So that the Work on *Shooter's Hill* was thrown up; and

and I believe there has not been a hundred Pounds of Salt made from the Waters since that Time in any Part of the Kingdom. Some time before this Work at *Shooter's Hill* was broke up, some Pains were taken to discover the Secret those had, who sold the Salt so cheap; and upon examining the several Salts that were sold about Town, those disposed of by Mr. G. and F. Moulst, were certainly genuine, and were therefore a proper Standard to judge of the rest by. But from all Experiments then made, there could no material Difference be found between the Salt made from the Waters, and that made by them who were in the Secret. There was indeed a Salt sold by some, which in the Course of those Trials, was found to be a *Sal Mirabile*, made from the *Oleum Vitrioli* and common Salt, but shot into such small Crystals, as not at first Sight to be distinguished from the other: Necessity being the Mother of Invention, it was not long before it was discover'd, and the Experiment was tried at the *Lady Carrington's* Salt Works near *Portsmouth*; where it was found the same Thing could be done, as at another Work not far from it, and in which Dr. *Hoy* had been concern'd. It was some Years after this Salt had been made at *Portsmouth*, before the Salt Makers at *Lemington* attempted, or indeed knew the Method of making it, who are now the greatest Traders in it, and have sent several Ton in a Year to *London*, besides what has been directly exported from thence. It was the Opinion of the Proprietors of the *Salterns* near *Portsmouth*, that this Purging Salt could not be made at any other Salt Works but theirs, and that the bitter Taste in the Salt was communicated from the Earth to the Sea Water, whilst it stood exposed in their Sun Pans. But Time has proved this Opinion false;

for besides what has been said of its being made at *Lemington*, it was some Time ago begun to be made near *Newcastle*, where it is still continued to be made, and doubtless may be made at any Salt Works, where the common Salt is made from Sea Water by Evaporation. Whether any Thing of this Kind has been attempted at any of our Inland Salt Springs, either in *Sheshire* or *Worcestershire*, I am not yet satisfied. There is some Difference in the making the common Salt in *Hampshire*, from that about *Newcastle*. At the first of these Places, in the Beginning of the Summer, at Spring Tides, or at New and Full Moon, the Sea Water is let into their feeding Ponds, which are their Reservoirs for their Summers working, and from hence is convey'd into small square Pans, and again, after some Time, from these it is convey'd into large Pans, or Beds, which they call Brine, or Sun Pans, all which are made of Sea-Mud and Earth. In these last Pans, or Beds it lies exposed to the Sun and Wind, in order to exhale the weakest Waters; and it is in these Beds, if the Weather prove very favourable, that they can make as good Bay Salt as any we have from *France*; and at such a Time they never bring their Brine to the Boilers. But if the Weather is not hot enough for that Purpose, their Brine is exposed so long in these Pans, till it becomes of such Strength as to support their Eggs made of Glass or Wax, to a certain Height above the Surface of the Brine, which from thence is conveyed into large Stone Cisterns, and then into boiling Pans made of Iron, where it is boiled down (after having been frequently scumm'd) to a Sea Salt. 'Tis observable, that whilst the Brine is boiling, there precipitates a hard crusty Matter, which is partly taken out by Vessels placed

In proper Parts of the Pan for that Purpose, and Part of it fixed on the Bottom of the Pan so hard, as to be afterwards dug off, and this the Workmen call *Scratch*, and is what Dr. Collins, concerning the Sea Water boiled at *Shields*, calls a Stone Powder. When the Operation for the Sea Salt is finished, it is taken out hot, and put into wooden Troughs, with Holes at the Bottom; through which runs the superfluous Liquor: Under these Troughs are set other Vessels with Sticks fixed in them in a perpendicular Posture, to receive what runs through. In these Vessels the Liquor is suffer'd to continue some Time, and according to the Quantity of the Sea Salt still left in it, will crystallize to the Sticks, something like Sugar Candy, but in much larger Shoots; and this they call *Cat-Salt*, or *Salt-Cats*, and it holds some Share of the bitter Salt. When this Salt is broken small, or rather powder'd, it is so white, that some Gentlemen choose it for their Tables; but the greatest Consumption of it is among the Cake Soap Boilers. The Liquor that will not shoot to these Sticks, is what, at these Works, they call the *Bittern*, fit for making the *Sal Catharticum*. Near *Newcastle*, their Method is to receive the Sea Water into their Reservoirs at High Water, at any Time of the Moon, if there be no Fresh in the River, occasioned by Rain in the higher Country, and from these Reservoirs, without exposing of it in Beds, as at *Lemington*, they pump it into their boiling Pans, where evaporating it almost to a Pellicle, they fill it up again eight or nine Times, and then waste it with a gentle Heat for the common or Sea Salt. The Liquor that runs from this Salt, when taken out, and put into proper Vessels, is what they call the *Bittern*, which, if it stands some Time in those Vessels, a Salt

will shoot and crystallize to the Sides, in Taste pretty much like the Sea Salt, but with a Share of Bitterness, and seems to answer to the Cat Salt of the *Lemington Works*, and very probably would shoot after the same Manner, if they made use of the same Apparatus. I could not but mention this general and loose Account of making the common Salt, as necessary to introduce the Liquor *Bittern*, which, before Dr. Høy found out an Use for it, was always flung away, being so different in its Properties from the Brine made use of to produce the Sea Salt, that it requires some Skill in the Operator, to determine the Time when to take out the Sea Salt from the Pans, before the *Bittern* incorporated with it, which would otherwise spoil the whole making. The *Bittern* at *Lemington* not shooting to the Sticks, is carried by Channels into Pits made light with Clay, where it stands for some Months, and there will shoot again. What Liquor remains is boiled down, till it is observed to be in a Disposition to crystallize, and then is convey'd into wooden Coolers lined with Lead. The Liquor which will not shoot there, is boiled down after the same Manner, in order for another Crystallization. By this Time the Liquor seems to have alter'd its Property, and becomes of a very pungent biting Taste, and, if boiled down, will not longer shoot into Crystals, as before, but precipitates, during the boiling, as small grain'd Salt; and if they should continue to boil down the Liquor, separated from this Salt, each Quantity of Salt thus produced will be still more pungent than the other. If you boil down the whole Quantity of this Liquor, it will produce a Salt, which, if exposed to the Air, will run *per Deliquium*. The Liquor that produces this Salt is always flung away, wherever the *Sal Catharticum*

is made. This is what at present I can give no other Name to, than a third Salt produced from the Sea Water, differing in some Respects, as much from the other two, as they differ from one another. To return to the several Crystallizations, such as mentioned to be shot from the *Bittern*; these will be of different Sizes, as to their Figures, and hold some Share of the third Salt, but now taken Notice of, which makes them subject to give and dissolve; nor is their Taste come yet to that simple Bitter of the pure Salt. These therefore are either separately, or altogether, to be flung into a Copper, with as much common Water as is sufficient to dissolve them, and allow a gentle Evaporation, till they are again ready to be poured into the Coolers in order for Crystallization. This generally proves to be the pure *Sal Catharticum*, thoroughly freed from either a Sea Salt, or the third Salt. The Liquor decanted from this Shooting may be boiled down again, in order for a second Shooting, and after that a third; but as the Liquors from these Shootings are boiled away more or less, so you will sooner or later meet with the pungent Liquor, which contains the third Salt, as you did in the former Shootings from the *Bittern*, from which the pure *Sal Catharticum* is as necessarily required to be freed as from the common Salt; a Proof of which cannot be better determined than by the following Experiments, viz. that with the *Oleum Vitrioli*, which will certainly ferment with this Salt, if the Sea Salt has not been well separated from it, or if it still holds some of the third Salt. And when any of the Crystallizations will not stand the Test of this Experiment, they ought to be dissolved and shot again, as before, by which Means the pure Salt is to be obtained. I do not mention, says *Brown*, this as a Trial made use of at the Salt Works,

but what I have by Experience found to be true. And the same Experiment will serve to distinguish a *Sal Mirabile* made at these Works, from that made with Oil of Vitriol and common Salt. The Account they give of it is this: They take any Quantity of coarser grained Crystals boiled from the *Bittern*, which, when dissolved and evaporated, more than they would otherwise do for making the *Sal Catharticum*, they throw it into a wooden Bowl, with some Oil of Vitriol, where it stands for ten Days, and shoots into large Crystals, transparent, and like the *Sal Mirabile*. But as this Salt, by this Method, is not sufficiently satiated with the Oil of Vitriol, if they use any, so it is easily discovered by the Oil of Vitriol, which will readily ferment with it; whereas it has no Effect on the other *Sal Mirabile* made as above. This is the Salt now sold in the Shops by the Name of *Epsom* and *Glauber's* Salts, and is a pretty good diuretic Purge, where the *Præviæ* are intended to be unloaded. But it should be given with a considerable Quantity of some diluting Fluid, as mineral Waters. Dr. *Grew* recommends his *Epsom* Salts to excite a decay'd Appetite, to stop habitual Inclinations to vomit, for Pains in the Stomach, in hypochondriacal and hysterical Disorders dissolved in chalybeate Waters, for the Colic, in Worms, nephritic Pains, the jaundice, Head-ach, and wandering Gout. But he cautions against using it in Dropsies; in a continual Fever, in an Ague; the Green Sickness, spitting of Blood, *Cholera Morbus*, and the Palsy. Nor are they to be allowed to Women with Child, without great Circumspection. They may also prove hurtful in a Suppression of Urine, which depends upon an Ulcer in the Bladder, or a Stone too big to pass; in either of which Cases the Patient is to abstain from all Diuretics. But otherwise

otherwise I have often, says he, given this Medicine successfully, in bringing away the Urine, and Stones with it not of the least Size. *Quincy* is very much enrag'd at this Cheat, as he calls it, and seems to disapprove of the factitious *Sal Catharticum* as a Medicine. I must confess I am not entirely of his Opinion, because of the vast Quantity of these Salts used in Medicine, I have known no bad Effects produced, but on the contrary a great many good ones. When, however, this Salt is sold instead of the *Glauber's Salt*, it may be esteemed a very great Fraud; and the excessive Price, that the *Sal Catharticum* is generally sold at, is certainly another, for it does not cost four Pence a Pound originally.

Sal Polychrestum de Seignette. This Salt, which has been used in Medicine for many Years, takes its Name from Mr. *Seignette*, a Physician of *Rochele*, who invented it, and during his Life kept it a Secret, which he only transmitted to his Children, who in their Turn kept the Secret so inviolably, that no Chymist was, for a long Time, able certainly to discover the Mystery, some taking it for one, and some for another Thing. The great Reputation of this Medicine, induced Mr. *Boulduc* to attempt a Discovery of its Composition. In order to make this Salt, we take, says he, the best calcined, whitest, and hardest *Alicant Kali*, reduced to a Powder; of this we make a strong *Lixivium* by boiling in Water, and filtrate the *Lixivium*, which is very transparent. Then we take separately some Cream of Tartar in Powder, upon which we pour this *Lixivium*, when warm. This Mixture excites a Fermentation, which lasts for a considerable Time, and which even after it has ceased, is renewed at certain Intervals. In the Time of this Fermentation, the Cream of Tartar is resolved; after

which there is a copious Precipitation of a spongy and light Earth, which is to be separated from the Liquor by Filtration. Then we evaporate this Mixture to the Consumption of about a third Part. Then it is to be left at rest in earthen Vessels, by which Means, after some Days, we find Crystals transparent like Crystal, which when disengaged, and not supported by the Vessels, are formed into Cylinders or Columns, which through all their Length have many flat Surfaces, above nine of which I have some times, says he, counted, tho' they are not generally found in so great a Number. It is impossible exactly to determine the precise Proportion of the Salt of *Kali*, and the Cream of Tartar, since some Kinds of *Kali* contain a larger Quantity of Salt than others. But the most natural Way of finding this Proposition is, to dissolve in the *Lixivium* as much Cream of Tartar as it will receive, that is, to the Point of Saturation. A *Lixivium* of six Pounds of *Kali* generally absorbs two Pounds and three or four Ounces of Cream of Tartar, and when the *Kali* is very white and richly impregnated with Salt, the *Lixivium* of six Pounds some times absorbs an equal Weight of Cream of Tartar. This Difference as we may easily conceive, can only depend upon the Quality of the *Kali*, according as it is more or less impregnated with alkaline Salt. But when, says he, I took the Salt which subsided in the Solution or *Lixivium* of *Kali*, and the Configuration of which nearly resembles that of *Glauber's Salt*, half a Pound of this Salt dissolved, easily received thirteen or fourteen Ounces of Cream of Tartar, and the Mixture precipitated scarcely any Earth. This is the justest Proportion that can be proposed for the Substances which enter the Composition of Mr.

Seignette's

Seignette's Sal Polychrestum. If we only wait for a short Time, we have the Crystals of *Kali*, after which the Mixture is more equally made, and is not subject to the Precipitation of the different heterogeneous Substances which the *Kali* communicates to the *Lixivium*. In a Word, this Salt when formed into Crystals, and compared with that of Mr. *Seignette* also crystallized, was found to be precisely the same in all Circumstances; for they are figured like each other, are easily dissolved in cold Water, when reduced to a Powder, have the same Taste, and communicate a certain Coldness to the Tongue. When put upon a live Coal, they become fused and bubble, yield the Smell of burnt Tartar, and are at last reduced to a black and spongy Coal, which yields Tartar. If after this Examination, we should doubt of the Conformity of this Salt with Mr. *Seignette's*, we may be convinced of it by an Experiment, which makes a speedy Decomposition of it: For if we dissolve equal Quantities of both Salts separately in warm Water, and pour into each a Solution of Oil of Vitriol, till its Action ceases, in Proportion as these Solutions become cold, a saline Concretion is formed, which when examined, is found to be true Cream of Tartar in Crystals regenerated or separated from the *Alkali*, whilst the Oil of Vitriol is united with it, and afterwards by Crystallization, forms with it a *Glauber's Salt*, in the same Manner as if this Oil had been poured upon the *Lixivium* of the *Kali*. The *Sal Polychrestum de Seignette* is therefore a Cream of Tartar rendered Soluble by the *Alkali* of *Kali*. By the Composition of this Salt, we may understand its Virtues in Medicine. As 'tis a neutral Salt, in Consequence thereof, it must be attenuating, aperient, resolvent, and penetrating, and should seem to be much preferable to the *Sal Cathar-*

ticum amarum, in all Intentions where that is used.

Sandiver, Axungia Vitri, or Salt of Glass, is a Kind of Salt which separates from the Metal of Glass whilst in Fusion. It is of an acrimonious and biting Taste. The Farriers use it for clearing the Eyes of Horses. It is also used for cleaning the Teeth, and is sometimes applied to running Ulcers, a *Herpes*, or the Itch, by Way of Destructive.

Sapo. Soap. This, tho' a Composition, may be consider'd in this Place as a Drug. There are many Kinds of Soap, but the principal used in Medicine are those of *Venice*, *Alicant*, and *Castile*. The general Method of making Soaps are, according to *Boerhaave*, thus. They take the fix'd alkaline fiery Salt, prepared with Quick-Lime; this they dissolve in such a Proportion of hot Water, that the Lie may support a new laid Egg; and this the Soap-makers call their capital Lie. They afterwards dilute Part of it with more Water, till a fresh Egg will sink therein; and this they call the weaker Lie. They afterwards mix their Olive Oil with an equal Weight of this Lie, by stirring them well together, till the whole becomes white, then boil the Mixture with a gentle Fire, keeping it continually stirring, till the Water being exhaled, the Remainder begins to unite, at which time they throw in thrice the Weight of capital Lie, in Proportion to the Oil, and mix and boil till the Mass becomes so thick, that a little of it laid upon a cold Stone, appears to be of a due solid Consistence; and if now a Part of this cold Mass is dissolved in Water, it manifests no Signs of Oil, this shews that the Oil is well united with the *Alkali*; but if any Oil still appears, the Addition of a little more capital Lie is required, and the boiling must then uniformly be continued, till the

Soap will perfectly dissolve in Water. At this Time the Soap is tasted, and if it proves sharp and alkaline, it is a Sign that the Alkali abounds too much therein. Therefore a little more Oil is added, and the boiling continued, till at length a Mass is obtained, so hard as to cut in the Cold, and that will perfectly dissolve in Water, and neither taste alkaline upon the Tongue, nor run spontaneously in the Air; and thus the Soap is perfected. Instead of Olive Oil any other fat Substance may be used, as the Fats of Animals, and the Oils of Fish; thus black Soap is made from Train Oil, or the boiled Blubber of Whales; but the purer the Alkali is, and more scentless, tasteless, and less ungrateful the Oil, the better the Soap, especially for Medicinal Use. Soap so produced, tho' the Tenacity of the Oil is abolished, yet the former Virtue of the lixivial Salt remains, whereby it deterges without Danger of corroding; for when mixed with Water, it makes a strong saponaceous Lye, which by Heat, Motion, and Trituration, dissolves Gums, Oils, Resins, and gross Fats, rendering them also saponaceous, or soluble in Water; and thus it has a scouring, detergent, opening, cleansing Property. Hence it renders coagulating Humours fluid, opens old Obstructions, and thereby restores the lost Use of the Parts. It also has great Effects upon Concretions consisting of gross Earth and Oil; it prevents Acids from coagulating the Chyle or Milk; and even resolves them after Coagulation. Whence it appears to be almost an universal Opener, Diluter, Resolver, and Thinner in the Body, in the above-mentioned Cases, being drank upon an empty Stomach, well diluted and at different Times, in a sufficiently large Quantity, and assisted by the Motion of the Body. It is

likewise wonderfully serviceable, being externally applied in sinuous and fistulous Ulcers. It may be ting'd and disguis'd, by giving it a grateful Colour with Saffron, Turmeric, Cochineal, or other Pigments; and if it still proves disagreeable, on account of the nauseous Smell acquired by the Oil in boiling, it may be corrected by a little Balsam of Peru. But its Use is highly pernicious in those Distempers, where Life is in Danger from a Putrefaction, that dissolves and corrupts the Humours, as has frequently appear'd in the Plague, and other putrid Distempers, according to the just Observation of *Diemerbroeck*. Soap effects what neither Water nor Oil could perform, does that with Safety which Alkalies do with Danger, and can perform what other Salts cannot.

Spiritus Vini. Spirit of Wine, or more properly *Vinous Spirit*; for what is usually called Spirit of Wine, is procur'd from the fermented Juices of many other Vegetables besides that of the Grape. What is called *Proof Spirit* is generally esteem'd the best, but for common Uses *Molossus Spiritus* may serve, as we are inform'd by the Compilers of the last College Dispensatory. Rectify'd Spirit is the same, depriv'd of all, or a great Part, of its Water, and freed as much as possible from its disagreeable Smell. We meet with nothing like Spirit of Wine before the thirteenth Century, when *Thaddeus* takes Notice of it. And some little Time after, *Arnaldus de Villa Nova* mentions it in very high Terms, under the Title of *Aqua Vini*. Spirit of Wine brought to a great Degree of Perfection, or what is called *Alcohol*, is the lightest Fluid next to Air, perfectly transparent, very thin, most simple, totally inflammable, without producing any Smoke, or diffusing any disagreeable Smell whilst it is burning; and is exceedingly

exceedingly volatile, without leaving any Fæces ; absolutely immutable in Distillation ; extremely expandible by Heat ; very easily disposed to Ebullition by Fire ; of a very pleasant Smell, and of a particular grateful Taste. All the Humours of the human Body, that we are acquainted with, it coagulates in an Instant, except pure Water, and Urine, whilst it hardens all the solid Parts, and thus preserves both from Putrefaction, or spontaneous Colliquation : It preserves the Bodies of Insects, Fish, Birds, and other Animals that are put into it, from Corruption, or Alteration, for Ages, if closely stopped : With Water, Vinegar, any acid Liquors, Oils, and pure volatile alkaline Salts, it suffers itself to be mixed, and that nearly with an equable Mixture ; and gummy and resinous Substances it dissolves. So that we are acquainted with no Liquid, produced either by Nature or the Art of Chymistry, that is capable of being united with more Bodies than Alcohol is ; but in a particular Manner it proves an excellent Vehicle for the *Spiritus Rectior* of Vegetables, which by uniting with it, may be extracted from its proper Body, retained, and applied to medicinal, and other Uses. The great Masters of Chymistry, distinguished by the Title of Adepts, are supposed, in their Description of the artificial Preparation of this perfect Alcohol, to have shadowed out the Preparation of the Philosophers Stone : But it is certain, that this Alcohol owes its Origin to Fermentation alone, nor can be prepared in any other Manner whatever. In the human Body, by its Smell, Taste, and Vapour, it wonderfully quickens, gratefully affects, and invigorates the animal, natural, and vital Spirits, Nerves and Brain : Hence it exhilarates the Mind and Senses, makes a Person brisk and agile, and proceeding thro'

various Degrees, at last causes Drunkenness, which, as it here comes on very suddenly, so likewise it goes off in the same Manner. The Blood, its Serum, and other thin Juices it coagulates in an Instant, and hence being drank imprudently, it is said to have killed Persons on the Spot. Applied externally, it dries, and corroborates the Vessels, and coagulates the Fluids contained in them, where-ever it can penetrate. The Extremities of the Nerves where it can reach it instantly dries, contracts, and deprives of all Sense and Motion. Hence it appears, how imprudently, and often, how unhappily, Alcohol, either pure or impregnated with aromatic Spirits, Camphire, or the like, dissolved in it, and ordered to be applied hot, and enforced with Friction, is made Use of as a Fomentation in surgical Cases. I would advise, therefore, to be cautious upon these Occasions, lest under a specious Pretence of Vivification, Calification, Dissipation, and Restoration of Agility, you obtain no other Effects than what I just now ascribed to these Spirits. In Wounds, Ulcers, and other visible Disorders, pure Alcohol performs the very same thing, (*viz.*) Coagulates, dries, and burns the Nerves. It is true indeed, it takes from the Nerves all Sense of Pain ; but then at the same time it destroys all their Use. And it has the same Effect, in mitigating Punctures or Dilacerations of the same Parts. It stops bleeding at once by contracting the Vessels, and coagulating the Blood, where it is applied, but with the concomitant Circumstances just mentioned. Hence, therefore, it is a very speedy, and often an excellent Remedy in those Cases, though always attended with some Inconveniences. From what has been said, then, we learn what Effect pure Alcohol has upon animal or vegetable

table Substances immersed in it. For it dissolves into itself, and extracts whatever is oily in them, whence they become attenuated, contracted, and often corrugated. In this Manner the Preparations of the Parts of Animals have often been observed to be changed: And aromatic Flowers, Leaves, and Fruits are thus affected from the same Cause. Small Birds in their Feathers, and other little Animals cover'd with hard Scales, immersed in hot Alcohol, are preserved in their full Beauty, because this Attenuation, though it really happens, is concealed under their Feathers, and Scales. These Animals being macerated for some Time in the purest Alcohol, till they are thoroughly penetrated by it, and then taken out, and dried in a hot, but not fervid Oven, and afterwards put into Glass Vessels, and intirely debarred from any Communication with the external Air, may be kept in their proper Form for Ages, to the very great Advantage both of natural and medicinal History, because they afford lively and certain Characters by which they may be known. Since there are infinite, and often times very inviting, Occasions in which Chymists and other Artificers stand in Need of the true and purest Alcohol, the least Remainder of Water rendering the Operation unsuccessful, it is absolutely necessary we should have some Marks by which we may be able to distinguish, whether our *Alcohol* be pure or not: The principal of these are, if the supposed *Alcohol* contains any Oil dissolved in it, and so equally distributed through it, that it is no ways perceptible, then upon the pouring of Water into it, the Mixture will grow white, and the Oil will separate from the *Alcohol*. If any thing of an Acid lies concealed in *Alcohol*, a little of it mixed with the alkaline Spirit of *Sal Ammoniac* will discover the Acid by an Effervescence; for other-

wise there would be only a simple Coagulation. If there be any thing of an Alkali intermixed, it will appear by the Effervescence excited by the Affusion of an Acid: And as for other Salts, they are seldom found in it. But it is a Matter of greater Difficulty to discover whether there be any Water intermixed with it; and therefore Chymists have contrived certain Methods, by which this may be also determined. The first was the repeated Labour of so many Distillations, which they thought sufficient Grounds for them to presume that they were in Possession of pure simple Spirits, without the Admixture of any Phlegm; but, it is difficult by this Method to obtain pure *Alcohol*; but it would to the last retain something of Phlegm. Secondly, they put some *Alcohol* into a very clean, dry Spoon, and, heating it, set it on fire in a Place where there was not the least Wind, and if after the *Alcohol* was burnt out, there was no Moisture left in the Spoon, they pronounced it pure *Alcohol*. Some more curious Persons, however, by other Experiments, discover'd, that by the Action of the Flame, the Water that lay concealed in the *Alcohol*, might be dispersed into the Air, and consequently that the Absence of Water in the Spoon, after the Consumption of the *Alcohol*, was no certain Proof, that there was none contained in it, before it was set on Fire. In the third Place, therefore, they took some of the best Gun-powder, and drying it very carefully put a little of it into a clean and very dry Spoon, and poured some *Alcohol* upon it, which being heated, they just stirred it in the very Surface, and letting it burn down in a very quiet Place, if the Powder continued dry enough to take Fire by the Flame when just spent, they concluded that the *Alcohol* was pure: But against this Experiment there lies the very same Objection as against the former.

mer. These two last Methods, therefore, when they succeed, demonstrate, that the *Alcohol* is in a very great Degree, but not absolutely free from Water. In the fourth and last Place, therefore, there has been another Way discovered, by which it may be certainly known whether *Alcohol* contains any Water or not, which is this: Take a chymical Vial, with a long narrow Neck, the Bulk of which will hold four, or six Ounces of *Alcohol*. Fill this two-thirds full with the *Alcohol* you intend to examine, into which throw a Dram of the purest and driest Salt of Tartar, coming very hot out of the Fire: then mix them by shaking them together, and set them over the Fire till the *Alcohol* is just ready to boil; being thus shaken and heated, if the Salt of Tartar remains perfectly dry, without the least Sign of Moisture, we are sure that there is no Water in this *Alcohol*: Hence the singular Nature of *Alcohol* is abundantly determined by its individual Properties; especially if to what has been said you add this Observation, that such an *Alcohol* is not visible whilst it distills through the Alembic: For it neither forms dewy Drops like Water, nor runs down in Striae like strong Spirit of Wine, but it is quite invisible; which Property was not unknown to the ancient Chymists, as evidently appears by their Writings. As all vinous Liquors borrow their intoxicating Qualities, and all their Properties wherein they differ from other Fluids, from the *Alcohol* which resides in them, I shall make some Remarks, with respect to the Uses generally made of them in common Life. First, then, as vinous Liquors have Effects upon animal Bodies, nearly allied to those of the *Gas Sylvestre*, or incoercible Spirit, which flies off from fermenting Liquors. It seems near a Certainty, that fermented Liquors inebriate

and produce all their deleterious Effects by a Portion of this *Gas Sylvestre* residing in them. Hence appears the Imprudence, I should rather say Madness, of those who take into their Stomachs large Quantities of a Fluid strongly impregnated with the most subtil and penetrating Poison known in Nature, and which we find by daily Experience never fails to disorder, and if persisted in, to destroy the animal Machine. The Frequency of this Practice is amazing, and would scarcely be credible, if it was not common. I should think myself happy, if any thing I could say would put the least Check to this bestial Crime, to which it is astonishing there should be any Temptation; for I am satisfied, that this alone destroys more Lives than the Accidents of War, added to all the Distempers with which Providence has thought proper to afflict Mankind; and it is very remarkable, that besides the Distempers produced by drinking spirituous Liquors, an habitual Use of these renders all Diseases from other Causes more difficult to cure. It is certain, that fermented Liquors are deleterious, in Proportion to their Strength, that is, in Proportion to the poisonous Spirit or Gas they contain. However, though small fermented Liquors do not immediately manifest their Effects, yet I think it is not to be doubted, but that an habitual Use even of these, must in the End induce an Alteration in the Constitution to its Disadvantage. I am sensible, a Habit of drinking these Liquors renders them somewhat necessary, and makes it difficult to leave them off, and sometimes even dangerous. It is therefore a great Imprudence in People of Condition, to inure their Children to the Use of Wine, and other fermented Liquors, from their most tender Years. If we consider *Alcohol* as acting upon the Stomach only,

and at the same Time reflect, that it dries and contracts the Nerves, and deprives them of all Sensation and Motion, we shall readily perceive, that if taken in the Stomach, when it is empty especially, they must necessarily, by their proper Action, take away that Sensation which we call Hunger, and destroy that Elasticity of the Fibres of the Stomach, which is absolutely necessary to the Digestion of the Aliment. To these Inconveniencies arising from the internal Use of *Alcohol* it may be added, that it coagulates the animal Juices, and consequently all the Fluids it finds in the Stomach, I mean those Fluids which are separated in the Glands of the Mouth, *Fauces*, and Stomach, and which are designed by Nature to promote the Solution of the Aliment; now when these are coagulated, and rendered viscid, they are utterly unfit to promote the above-mentioned Solution, but rather prevent it. Every one that has seen a Person, much habituated to drinking Drams, take a Vomit, must have observed him to discharge from his Stomach great Quantities of a viscid ropy Jelly. If we consider spirituous Liquors as a Solvent of the Aliment, we shall find it so far from being fit to promote this Solution, that it greatly contributes to prevent it, for it hardens animal and vegetable Substances, and hinders their Solution in the Stomach, for the very same Reasons, that it prevents their Putrefaction out of it. It would be well if spirituous Liquors had any Virtues to make amends for the Havock and Destruction they make in the World. And to do them Justice, I believe, that rough austere red Wines may be of Service for bracing up a relaxed Habit, and promoting Digestion vitiated by an accidental Luxury of the Organs subservient thereto; and that the more penetrating white Wines, well dilu-

ted, may be of Service as Medicines. But with Respect to any thing more spirituous than Wine, there is scarcely any Case wherein they can be of sufficient Service to compensate for the great Mischiefs they produce; insomuch that every Person who drinks a Dram, seems to me guilty of a greater Indiscretion, than if he set Fire to his House; and for the same Reasons, cordial Waters are the most dangerous Furniture for a Closet, particularly as there is something like Fascination in them, which obliges the Possessor to make Use of them, to the Destruction both of Health and Intellects. On this Account, I cannot forbear admiring the great Wisdom of *Mahomet*, who has strictly forbid his Followers the Use of fermented Liquors, for better Reasons than are generally apprehended. However *Alcohol*, and fermented Spirits in general, are of good Service externally apply'd in many Cases. Thus Spirit of Wine, especially camphorated, is a very good Addition to Fomentations designed to resolve Inflammations, whether external or internal. Wine used as a *Forus*, or applied externally, cools, and allays the Heat of the Parts, notwithstanding it warms taken internally. Spirit of Wine does the same. *Pliny* says, it is the Nature of Wine to warm the *Viscera* taken internally but to cool externally apply'd. *Hippocrates* says, that Ulcers should be washed with nothing but Wine. *Galen* says, Wine is the best Medicament for Ulcers. *Dioscorides* says, that Wine in *Lana Succida*, is a good Application for Wounds and Inflammations. Dr. *Harris* from his own Experience affirms, that linen Cloths dipped in warm Spirit of Wine, often cure Burns from scalding Water, melted Pitch, Fire, and Gun-powder, better and sooner than all other Applications. He gives an Instance of a Boy that was blinded by

a Drop of Pitch falling into his Eye, and of another blinded by Gun-powder, who both recovered their Sight the very next Day, by a *Fotus* of warm Spirit of Wine. Dr. Harris also affirms, that warm Wine is the best Application for Wounds, Ulcers, and Inflammations, especially those of the most sensible Parts, that are full of Nerves, Tendons, and Blood-Vessels, as the Fingers and Toes, where Incisions and Punctures often cause great Pain, and endanger a Mortification. The *Turks*, who are ignorant generally of Surgery, unless perhaps some wandering *Jew* practises it amongst them, foment their Wounds, and wash them with Wine successfully. Gangrenes will sometimes happen from unskillfully cutting Corns, or the Nails of the Toes, especially if they are exasperated with Unguents and Plaisters. Spirit of Wine and *Theriaca* are the best Topics in such Cases. Spirit of Wine used as a *Fotus* for a sufficient Time, and upon some Occasions repeated, extinguishes the Heat of an Erysipelas, sooner than any other *Fotus* whatever, whether the Erysipelas is cutaneous, true, and genuine, or spurious, more profound, and deeper in the Flesh. Erysipelatous Pains in Wounds and Ulcers are cured by a *Fotus* of Spirit of Wine. If Vesicatories cause great Pains, and endanger a Mortification, a *Fotus* of Spirit of Wine will cure them. Inflammations caused by Vesicatories, which are attended with violent Pains, and a blackish Colour, and which tend to a Gangrene, are easily cured by fomenting them with a linnen Cloth doubled, and dipped in hot Wine, or Spirits of Wine, and afterward applying such a Cloth wetted with Wine, or Spirit of Wine upon the Part, without Plaisters, or unctuous Medicines. There is a Species of Colic, which Women are subject to,

which is extremely painful, and is sometimes fixed on the right Side, sometimes on the left, below the Navel, without Vomiting. Dr. Harris says this is cured in a Day's Time, or on the same Day, by an Application of doubled linnen Cloth dipped in very hot Spirits of Wine, and continued a long Time, even where Narcotics are useless, or sometimes noxious. This I have frequently found of great Efficacy, in the Case the Doctor mentions. As this Author was a Man of undoubted Integrity, his Authority has the greater Weight.

Tartarus, *Offic. Tartar. Wines*, especially those prepared from Grapes, or of an acid, and austere Taste, usually afford a copious Tartar, but not in Perfection, till they are once thoroughly fermented; and they afford the purest, when put up in a clean Vessel. It is more plentifully obtained from the Wine, when this has rested sometime upon the Lees; and, in some Measure, gently consumed it. The Tartar of fine white Wine is white; whence *Rhenish* Wine affords the best, which is white; and collected in thick Pieces, for medicinal Use, and the whiter, heavier, more shining, and thick the Pieces are, the better. That of red Wine is red, more impure, less firm, and the Pieces less solid, and more unctuous: This stony Salt of Wine is difficultly dissolved in Water, or Wine itself, but remains almost like a Stone therein. If boiled in a large Proportion of Water, it dissolves in some Measure, and makes a turbid Liqueur, wherein numerous shining Corpuscles are observed to float; and thus, in the Boiling, it constantly throws up a Skin to the Surface; which, if taken off with a Skimmer, and put into a wide Vessel to be dried, is called by the Name of *Cream of Tartar*: And thus, by Degrees, the whole Quantity of

Tartar may be converted into a Kind of white acid Powder, excepting only a few feculent Parts, remaining at the Bottom. If pure white Tartar be boiled with twenty times its Quantity, or more, of Water, till the whole is perfectly dissolved therein, and the boiling Liquor be now immediately put into a Cask, without admitting any *Faces*, a Crust will presently begin to form in all the internal Parts of the Vessel touched by the Liquor, and this Crust increases, till, in a short Time, nearly all the Tartar shoots into little shining figured Lumps, called *Crystals of Tartar*; which, being collected, and gently dried, are thus to be preserved separate. The remaining Water, when cold, retains but little of the Tartar. These Operations shew, that the Nature of the Salt, which is produced by vinous Fermentation, entirely differs, in these Properties, from any other known Salt. A new Solution also of the Cream or Crystals of Tartar, may be made in fresh boiling Water, so as to obtain them each time more pure and white; but the Virtue of them both, scarce appears greater for any chymical or medicinal Uses, than that of Tartar itself. It is a great Corrector of those Bodies which abound in a sharp bilious putrid Matter, and hence becomes an approved Remedy in acute Diseases; it cleanses the first Passages, without much disturbing the more internal Parts. With a corrupt acrimonious Matter it looses its Acidity, changes into a very soluble Substance, and hence becomes a good aperitive Remedy. As Tartar is a Thing of very great Importance in Medicine it may be worth while in this Place, to consider its *Analysis*, which I shall give in the Words of the celebrated *Boerhaave*: "Fill two-thirds of a Glass Retort, with choice Pieces of the best white Tartar, and place it in a sand Fur-

nace, apply a large Glass Receiver, or one that is of the greatest Size, and lute the Juncture with a common Mixture of Linseed-Meal. Apply a gentle Fire for some considerable Time, scarce exceeding one hundred Degrees, there will come out a small Quantity of a limpid, thin, tartish, somewhat spirituous, bitterish, and lightly odorous Liquor, which is so penetrating, as easily to sweat thro' the Luting; let this be kept separate, then the Fire being raised to the Heat of boiling Water, a white Vapour comes over and along with it a highly penetrating Spirit which is wonderfully flatulent and will pass thro' almost any Luting, and if we endeavour to confine it by that call'd the *Lutum Sapientiae*, it bursts the Glass by its Elasticity, and it usually breaks out with Force, or perspires at Intervals, thro' the Luting, and along with this flatulent Spirit, there comes over a thin, and extremely subtle Oil, of a yellow Colour, a somewhat aromatic Taste, bitter, heating, and of no ungrateful Odour. This surprising Oil I have found so incredibly penetrating, that when the Neck of the Retort enter'd five Inches into the Mouth of the Receiver, and the Juncture was closely luted, yet this volatile Oil always returned back, and pass'd thro' the Body of the Luting so as partly to distill in Drops, into a Cup set underneath, and in Part to run down the external Surface of the Receiver, nor could I hitherto by any Means prevent this Effect; for if a Luting be applied, that the Oil cannot pass thro', the Vessel flies to Pieces. I did not therefore wonder to find *Paracelsus* and *Helmont*, so highly recommend this Oil in Disorders of the Ligaments, Membranes, and

" Ten-

“ Tendons, which they upon Experi-
 “ ence have declared may be cured by
 “ it even tho’ contracted. The for-
 “ mer Matters being collected se-
 “ parate, let the Remainder be
 “ urged gradually to the utmost De-
 “ gree of Heat that Sand will give,
 “ and thus again a Spirit will come
 “ over, and an Oil as before, but
 “ at the same time a gross, black,
 “ fetid, ponderous, glutinous and
 “ bitter Oil, leaving the remaining
 “ Tartar, black, sharp, and in every
 “ respect truly alkaline. If this
 “ Mass be urged with the strongest
 “ Fire of Suppression, it will still
 “ yield a very thick, black and pitchy
 “ Oil, along with a certain Smoak,
 “ and these will continue to rise,
 “ how violent soever the Fire be
 “ made, and how long soever the
 “ Operation is continued, and there
 “ will still remain an extremely black,
 “ sharp, alkaline and dry Mass, at
 “ the Bottom which being exposed
 “ to the open Air by breaking the
 “ Glass, grows hot upon Contact
 “ therewith, and readily dissolves
 “ into a Liquor, nor can it be kept
 “ dry without great Caution, where-
 “ as the Tartar from whence it was
 “ produced, would scarce dissolve
 “ in Water; when this dry black
 “ Mass is exposed to a naked Fire,
 “ in the open Air, it takes Flame,
 “ and after burning, leaves a copious
 “ white alkaline Salt behind, as
 “ strong, fiery and pure as can any
 “ way be prepared. It affords but
 “ little Earth, and readily dissolves
 “ spontaneously; if long detained in
 “ a strong Fire, it grows blue, of a
 “ marble Colour, and sometimes
 “ brown, and thus always becomes
 “ stronger and stronger.” From
 “ hence we learn many Particulars,
 “ and first how wonderful a thing Fer-
 “ mentation is, which separates all the
 “ gross Parts, and leaves a transparent,
 “ subtil, fluid Wine, which generates
 “ an almost stony Body that does not

dissolve in cold Water, while the
 Principles of this Body lay concealed
 in so thin a Liquor. This stony
 Mass also contains Water, a Spirit
 and different kinds of Oil, thick and
 copious. It is hard to conceive how
 this Oil could lie concealed in the
 Wine, which seems to contain Alco-
 hol indeed, but no such Oil; but
 what is more surprizing, the entire
 Mass of Tartar is merely acid, and
 makes an Effervescence with Alca-
 lies and yet by the bare Action of no
 violent Fire, in a close Vessel, with-
 out any considerable Separation of an
 Acid, the greatest Part of its whole
 Bulk is changed from an Acid to true
 Alkali, and this perhaps is the only
 Example where a fixt alkaline Salt is
 produced in a close Vessel, by a mo-
 derate Fire, without the free Ad-
 mission of the Air, whilst in other
 Cases only a black insipid Coal is
 thus produced. Who would have
 thus suspected that a manifest Acid
 could, by this Means, have changed
 to an Alkali? And if the acid Water,
 the Spirit and the Oil be poured back
 upon this alkaline Mass, from whence
 they were before extracted, and the
 Distillation, performed as before,
 scarce any Acid will come over and
 little Oil, but nearly the whole Mass
 will be turned into Alkali; whence
 we see that a large Quantity of a
 very acid Matter may be easily
 changed to an alkaline Substance,
 but, on the contrary, I am acquaint-
 ed with no Instance in Chymistry,
 of such a manifest Change of a strong
 Alkali into an Acid; Whence I can-
 not sufficiently admire the particular
 Nature of this Tartar, as knowing
 nothing like it. The first distilled
 and highly penetrating Oil of Tartar
 is recommended for dissolving cold
 Tumours, and for restoring Motion
 to the dried tendinous Parts in con-
 tracted Limbs, together with the
 Assistance of proper Baths, Fomenta-
 tions, and Frictions. If these Oils

be rectified and rendered more subtle and penetrating; they are recommended by Chymists, even for resolving gouty Knots and Concretions. It is said by many that rich Perfumes may be exalted by this Oil, but they also say that decayed Musks and Civet may have their Scents invigorated, by being suspended in a *Jakes*. Salt of Tartar may be thus prepared in a greater Proportion to the Tartar employed than by any other known Method, and in greater Plenty the slower the Distillation was performed. This is also the best, sharpest, most penetrating and pure of all the fixt Alcalies, nor is there any other known Body in Nature that affords more of such saline alkaline Matter than Tartar. And if the black alkaline Matter, remaining after the most violent Distillation, be set by in the Retort slightly covered with Paper, it wholly resolves into a Liqueur, which being filtered, affords an admirable Oil of Tartar *per Deliquium*, extremely fit for numerous chymical Uses and particular Operations. If the same be first strongly calcined in an open Fire, it thus also resolves in the Air and affords an Oil of Tartar *per Deliquium*, but of a more sharp and alkaline Nature than the former.

Vinum. Wine. The Principles, or Elements, of which Wine is composed, are, first, an inflammable Spirit: Secondly, a Phlegm: Thirdly, an acid tartareous Salt: And, fourthly, a certain sulphureous and oleous Substance. Wines therefore, differ from each other, with Respect to Taste, Smell, and Virtues; according to the Mixture and Proportion of these Elements. Such Wines as contain a large Quantity of inflammable Spirit, soon intoxicate, and heat the Body; but Wines in which the phlegmatic or tartareous acidulated Parts predominate, are of a laxative and diuretic Quality; nor do they

easily affect the Head. Wines which contain a great deal of an oleous and sulphureous Substance, such as old Wines, are of a deep yellow Colour, of a strong Taste and Smell; and as they are not easily transpired, so they remain long in the Blood, and dry the Body. There is, also, another essential Element, or Principle, in Wines, which is a certain sweet, oleous, temperate, and viscid Substance, discoverable in Wines which are not sufficiently fermented, or gently boiled; and such a Principle is, particularly, observed in strong Sack, Frontignac, and Hungarian Wine. This Principle not only renders Wine grateful to the Taste, but, also, of a nutritive and demulcent Quality. Tho' all Wines may be resolved into their constituent Principles, that is, a Spirit, an Oil, a Phlegm, a sweet Substance, and an acid tartareous Part, yet they differ in this, that some contain a sweet and subtle Sulphur, whereas others have a coarser Sulphur, which is not so grateful to the Taste. The Colours of Wines depend on the sulphureous oleous Principle, which, by the intestine fermentative Motion, is intimately resolved and mixed with the Parts of the Wine: The deeper the Colour, therefore, of Wine is, the larger Quantity of Oil they contain. When, therefore, the Spirit is abstracted from the Wine, the spirituous, aqueous, and acid Parts, are carried off, and there is left in the Vessel a thick Mass, of a darkish and very deep Colour; to which if a considerable Quantity of Water is poured, it is immediately tinged with the same Colour the Wine had in its natural State; which is a sure Proof that the Wine derived its Colour from the thick, sulphureous, and oleous Mass, which remains in the Vessel after Distillation. Red Wines receive their Colour from the red Pellicles of the Grapes, upon which they stand long

infused; the Acid, therefore, which is in Mufts, also, extracts and exalts the Colour which is contained in these Pellicles; for which Reason, that Colour is purely adventitious. All red Wines are possessed of an astringent Taste and Virtue, because they stand long infused not only with the red Pellicles of the Grapes, but, also, with their small Stones, which are of a manifestly astringent Taste. Hence they extract the astringent Principle from these two Substances, and receive it into themselves. The Countries lying between the fortieth and fiftieth Degrees of Latitude, such as *Hungary, Spain, Portugal, Italy, France*, a great Part of *Germany, Austria, Transylvania*, and a great Part of *Greece*, produce the best Wines; because, in these Parts, the Influence of the Sun is great. It is, also, certain, from Experience, that mountainous steep Places, with Rivers at their Roots, produce the best Wines; for, besides the Influence of the Sun, the Goodness of Wines, in a great Measure, depends on the fine and subtle Nourishment of the Grapes. Now because the Mountains are exposed to the Night Dews, which abound about the Rivers, and contain a subtle Water, intermix'd with an ethereal Principle, it is not to be wondered at, if Dew should be the best Nourishment for the finest Vines. But Dew alone is not sufficient for the Nourishment of Vines, which, also, requires Rains. The Nature of the Soil, also, contributes much to the Production of good Wine; for we observe, that the best Vines grow not in fat, clayey, gross, and black Soils; but rather in such as are stony, sandy, or chalky; which Kinds of Earths, though apparently barren, are yet very proper for Vines; because they long retain the solar Rays, which, by cherishing the Roots, make the Nourishment pass thro' all the Pores

of the Plant. Besides, the Waters, passing thro' such Earths, are attenuated and strained, and their grosser Parts separated, and retained; so that the nutritive Juice of the Plant must be more pure and subtil. The Causes of the different Tastes, Salubrity, and Insalubrity of Wines, are, without doubt, placed in the different Nature of the Soil; since Tracts of Ground, lying on the same Mountain, with equal Aspects to the Sun, and bearing Vines of the same Species, yet yield Wines greatly different, with Respect to Salubrity, Taste, and a penetrating Quality. The superior Virtues of the *Tokay* Wine, are, by the Inhabitants of that Part of the Country, ascribed to the Gold there produced, but more justly to the large Quantity of corroborating Sulphur contained in the Earth; since neither Gold, nor any other Metal, can contribute to the Fruitfulness of the Earth, much less to exalt the Juices of Vegetables, or render them more salutary. But the Reason why all the *Hungarian* Wines are more salutary than others, depends on the Subtlety and Fineness of the Nourishment with which the Vines are nourished, and the large Quantity of the aerial and ethereal Principle, which is intimately mixed with their Juices, and which renders both Aliments and Medicines far more salubrious than they would otherwise be.

In malignant Fevers, according to *Hoffman*, nothing is more excellent than Wine. The Malignity of these Disorders is known from a Defect of Motion and Strength, and from a Want of a due spirituous Quality in the Blood, arising from a slow Circulation of the same; all which indicate a certain Disposition of the Fluids to Putrefaction. It is, therefore, expedient, in all these Disorders, to restore the Strength, rouse the Spirits, increase the Circulation of the Blood, and promote Perspiration. These are the De-

signs of all Alexipharmics. But all these Intentions are answered by Wine, as is obvious, not only from the Authorities of practical Writers, but, also, from Experience: In those Disorders where the peccant Matter is to be expell'd to the Surface of the Body, such as the Measles, Small-Pox, and *Petechiæ*, where Nature is weak, and the Motion of the Heart is sufficient for the Expulsion, or when, through Weakness there is a Retrocession of the Eruptions, Wine is highly proper; but we are to abstain from its Use, when these Disorders are accompanied with an excessive Heat, an Ebullition of the Humours, and a quick Pulse. In continual Fevers, *Hippocrates* recommends white Wine, both alone, and mix'd with Water. Numberless Practitioners are of the same Opinion. Thus *Forestus* recommends fine small Rhenish white Wine; and *Helmont* tells us, that they who moderately use Wine in continual Fevers, easily recover, preserve their Strength, and sooner recover their former State and Condition. Wine is still more proper in Intermittents, which generally arise from Crudities, an Obstruction of the Evacuations, and especially a Suppression of Transpiration. This Liquor is to be exhibited pretty liberally, on the Days of Intermision; but sparingly, or not at all, during the Paroxysm, unless in the Decline of the Disease, and when the Body is disposed to sweat. The Reason why Wine ought to be prohibited in almost all Fevers, is this: A Fever is an intense Commotion of Blood, excited in order to remove and expel what threatens the Destruction of the Body. Now, it is sufficiently obvious, that where this Motion is intense, and too strong, Wine is to be sparingly used; but if this Motion is so weak and languid, that Nature seems ready to sink, it is to be quickened by a proper Dose of

white Wine, in order to restore languid Nature. In *Synopes*, and Loss of Strength, nothing is more excellent than Wine. *Galen* orders those afflicted with a *Syncope* to drink Wine which is thin, of a yellow Colour, and old, rather than such as is new, or of a middle Age: Because the first not only restores the Strength, and recruits the Spirits; but, also, by its Smell, or when applied to the Heart and Wrists, far surpasses all other Cordials, and Analeptics. In Nauseas, Weakness, Indigestion, and Inflation of the Stomach, nothing is more beneficial than Wine. Hence *St. Paul*, as we see in *1 Timothy* v. 23. advises *Timothy* to use Wine for a certain Disorder of his Stomach. *Galen* tells us, that the Wines which are yellow or white, fragrant and thin, are excellent Stomachics, especially if they are gently astringent; and such are the *Rhenish* Wines, which, on Account of their subtil, acid, spirituous, and astringent Principle, are highly beneficial, in exciting the Appetite, strengthening the Stomach, and promoting the Digestion of the Aliments. In a *Fames Canina*, or preternatural Voracity, *Hippocrates* recommends the drinking of Wine; and this Advice is founded on Reason: But that Author did not, in this Passage, mean every Wine, but only such as is generous, pure, and old. For the Cause of this Disorder is an acid corrosive Humour in the Stomach, which, by such Wine is excellently corrected, just as the corrosive Nature of Spirit of Nitre, or Vitriol, is corrected by the Admixture of Spirit of Wine; or as the Acidity of Tartar, so long as it is in Conjunction with the Wine, is so corrected, as to prove grateful to the Palate. In order to allay Thirst, nothing is more effectual than Wine mixed with Water; for, by this Means, it far sooner extinguishes Thirst, than if Water had been

been exhibited alone, since Thirst arises from an Obstruction and Constriction of those Glands which discharge the *Saliva* into the *Fauces*, for moistening them, and the *Oesophagus*; but these Glands are better opened by Wine and Water, than by pure Water; for which Reason *Hippocrates*, in acute Fevers, was not afraid to prescribe a Mixture of Water and Wine. In Vomitings of the Idiopathic Kind, or such as accompany Fevers as a Symptom, thin Wine is preferable to all other Liquors. In Colics, especially those arising from Flatulencies, or viscid Crudities, nothing is more beneficial than old *Rhenish* Wine. For this Purpose, *Hippocrates* recommends rich Wines, because it renders crude Matter fit for Concoction, attenuates what is thick, and discusses Flatulencies. *Crato* also recommends *Rhenish* Wine in Colics, but forbids the Use of *Moravian* and *Austrian* Wines, as also, the *Malmsey* Wines, which are sweet, thick, and turbid. In *Diarrhæas* and *Dysenteries*, which appear as the Symptoms of acute Distempers, small *Rhenish* Wine, either alone, or mixed with a Pisan, produces excellent Effects, since it is possessed of a subastringent Quality, by which the Tone of the Intestines, and their relaxed glandular Coats, are greatly strengthened: And as, in these Disorders, it is highly expedient to move the Humours from the Centre to the Circumference, to augment Perpiration, and provoke Urine, hence Wine is excellent, because it produces such Effects. Red Wines, on Account of their greater Astringency, are generally recommended; and if they are good, they may be used for that Purpose. In Obstructions of the Liver and Spleen, in the Jaundice, and Cachexy, Wine produces excellent Effects. *Solenander* a celebrated Practitioner, recommends a Mixture of chalybeate Water with a

Wine which is white, pure, ripe, not strong, but pellucid, such as the *Rhenish* and *Moselle* Wines, as highly grateful to the Liver; and asserts, that by their astringent Quality, they corroborate the *Viscera*. But sweet Wines, because they increase the Quantity of the Blood, are greatly condemned by *Hippocrates* and *Guarinhovius*. In Dropsies, *Hippocrates* extols austere, and aqueous Wines. And *Epiphan. Ferdinand.* informs us, that Persons labouring under an *Ascites* have been cured by the Use of *Malmsey* Wine alone. It is justly to be doubted, whether Wine is proper in hypochondriac Disorders; for I have frequently (says *Hoffman*) observed in Practice, that the Symptoms were exasperated by acid Wines, especially of the rough Kind. The Reason why hypochondriac Patients cannot bear Wines inclining to Acidity, seems to be this: On Account of the slow peristaltic Motion of the Intestines, their Contents are not promoted, hypochondriac Patients being generally costive, but become stagnant, and by their Continuance, contract an Acrimony. Hence Wine, in such Patients, is by the Stagnation of the *Fæces*, converted into a strong Vinegar, which stimulates the nervous Parts to Spasms. But since hypochondriac Patients require a Reinforcement of Strength, and call for additional Force and Heat in their Stomach, Wine is not to be absolutely denied them. Hence *Brunnerus*, in hypochondriac Patients, prefers old *Rhenish*, or good *Hungarian* Wines, moderately used at Meals. But those affected with Disorders of this Kind, ought to abstain from red, austere, and sweet Wines, and from the excessive Use of all. In a Scurvy, which generates a large Quantity of fixed tartareous Salts, *Rhenish* Wine is excellent, because it is diuretic. Hence *Sachsins*, informs us, that *Rhenish* Wines are highly beneficial

ficial in a Scurvy, because they by Urine, evacuate the tartareous *Sordes*; and that, in scorbutic Patients, he has observed an Evacuation of thick Urine, abounding with Tartar, procured by *Rhenish* Wines. *Reisner* recommends strong, generous, and unmixed Wines, for scorbutic Patients; but orders them to be drank in a small Quantity; and, if the Patient's Heat is increased, to be diluted with Water mixed with Raisins. In the Stone of the Kidneys, sweet, generous, and oleous Wines are by *Crato* justly condemned, because the Stone is generally formed by a Redundance of Blood obstructing the abdominal *Viscera* and Kidneys, and producing, first, an Inflammation, and then an Ulceration of the Kidneys, and then the Stone. But that a *Pletthora* is augmented by sweet Wines, we have already observed. The Stone is, also, generated in the Kidneys, by turbid and austere Wines, such as those of *Numbergen* in *Germany*. But *Rhenish* Wines are good against the Stone, because they are highly diuretic. *Schulzsius* recommends the *Neccarine* Wines. *Unzerus* extols rich Wines, moderately drank, after due Evacuation of the Body. *Montanus*, greatly recommends pure, ripe, and rich Wines of a white Colour, in nephritic Disorders. A Strangury, according to *Hippocrates*, is removed by drinking Wine; but this Aphorism is to be understood principally of generous Wine, because the Disorder treated of generally arises from a Suppression of Transpiration, which is restored by Wine of this Kind. It is a Question of great Moment, whether Wine is proper in arthritic and gouty Disorders? It is a common Persuasion, that these Diseases are produced by Wine, and that they are only to be cured by drinking Water, and abstaining from Wine. It is certain, that these Disorders arise from a sub-

tile Tartar, which lacerates the Membranes. Hence Wines, which contain a large Quantity of Tartar, seem to be prejudicial in them. But these tartareous Diseases proceed from an Obstruction of the Emunctories, and a Viscidity and Density of the Humours. But Wine excellently conveys the morbid Matter through the Kidneys, which are the proper Emunctories of the Tartar. Hence there is no Reason why Wines should not be admitted, especially since the Gout generally derives its Origin from a Weakness of the Stomach, a Defect of a spirituous Quality in the Blood, and a slow Circulation of the Humours. Hence, Wine exhibited with a proper *Regimen*, and by the Direction of a Physician, may prove a Preservative against the Gout, if it is used out of the Paroxysm. But as there are great Differences, not only between Wines, but, also, between Constitutions, so the Physician ought to be circumspect. Generous Wines, that are not acid, such as the *Hungarian* Wines, agree with some Patients. *Crato* orders gouty Patients to drink a little *Hungarian*, or *Malmsey* Wines at Meals. And *Solenander* recommends the moderate Use of Wine for gouty Patients, on Account of the Weakness of their Stomachs. The same Author speaks in the following Manner: "We are to observe what the State of the Stomach, and of the rest of the Body, can bear. Nor is absolute Abstinence to be enjoined Patients of every Temperament, Constitution, Age, and Method of Life; because there are great Varieties of Patients. If Wine, especially of the gently astringent Kind, is drank moderately, and at a proper Time, its Use will be beneficial, instead of hurtful. Thus we see, that by the Exhibition of a little Wine in the Decline of the Paroxysm, gouty Pains are alleviated,

“ted, because by the Heat and Spirits excited, the peccant Humour is dissolved, only the Patient must abstain from Wine in the Beginning of the Paroxysm.” Having thus considered the Efficacy of Wine for the Cure of internal Disorders, we shall now treat of the Injuries arising from its preposterous Use in some Disorders. It is, therefore, certain from Experience and Reason, that in all Disorders, where a great Quantity of Blood is congested, as in Inflammations, and most Disorders of the Head, especially an Head-ach arising from an hot-Cause, a *Phrenitis*, Madness, Vertigo, Epilepsies, Lethargies, and all drowsy Disorders, Wines of every Kind are prejudicial; for since in these Disorders the Blood is impetuously convey’d to the Part affected, and collected there, it must circulate slowly. Hence Wine, which by its Spirit ascends to the Head, and produces a greater Rarefaction of the Blood, which it forces more copiously and impetuously from the Heart, to the Part obstructed, must produce an Exasperation of these Disorders. *Hippocrates*, also, in a painful Repletion of the Brain, orders Abstinence from Wine; and asserts, that apoplectic Patients ought totally to abstain from Wines; and he further tells us, that in a *Sphacelus* of the Brain, and a Lethargy, the Patient is totally to abstain from Wine. A phrenitic Patient, says he, should be warmed with warming Liquors, and Potions; but Wine must not be used for this Purpose. And he also tells us, that mad Persons ought not to drink Wine. Wine is also hurtful in a Cough and Phthisis, because the *Aspera Arteria* cannot bear its acrid-Stimulating Quality. But since sweet Wine assists Expectoration, the moderate Use of it is not injurious; nor when the Cough is on

the Decline, is old *Rhenish* Wine to be prohibited, but rather prescribed. *Tirellus* tells us, that Wines support the Sound, recover the Sick, revive the Languid, and perform Miracles. Extracts, Quintessences, Boli-fes, and Pills, are to be despised in Comparison of Wines, which are the Support of the innate Heat; and ought, therefore, to be celebrated with Praises, proportioned to the Advantages Mankind reap from them. What I have said above with Respect to Wines, must be understood of those which are pure, and unadulterated, and not of the Wines commonly made use of among us, which as they are manufactured, must be extremely prejudicial both in Sickness and in Health. Wine as a Preservative of Health, has always been in high Esteem, but with what Justice I will not take upon me to determine; but I must remark, that the Antients drank their Wines in a manner very different from the Moderns; for the former mix’d at least four Parts of Water, but generally six, with their Wine, which must be attended with much more salutary Effects to the Constitution, than when taken pure, and undiluted, in the manner now generally practised. It is certain that Health, and an equable Circulation of the Blood and Humours through the Vessels, contribute greatly to the Improvement of the Imagination, Genius, and Courage. And Wine has been said to do this, in so great a Degree, that the Wit, Courage, and superior Learning of the *Greeks*, have been ascribed to the moderate Use of their generous Wines; all which they lost, and degenerated into a kind of brutal Stupidity, as soon as the *Turks* conquered their Country, and destroyed their Vines.

THE NEW
English Dispensatory.

B O O K IV.

GENERAL EXPRESSIONS *including several*
SIMPLES *at once.*

The five opening Rooti.

S MALLAGE.
Asparagus.
Fennel.
Parsley, and,
Butchers Broom.

The five emollient Herbs.

Marsh-mallows.
Mallows.
Mercury.
Pellitory of the Wall, and,
Violets.

The four cordial Flowers.

Borage Flowers.
Buglofs Flowers.
Roses, and
Violets.

The four greater hot Seeds.

Aniseed.
Carraway Seed.
Cumin Seed, and,
Fennel Seed.

The four lesser hot Seeds.

Those of Bishops Weed.
Smallage.
Stone-Parsley, and,
Wild Carrot.

The four greater cold Seeds.

Those of Cucumbers.
Gourds.
Melons, and,
Water Melons.

The

The four lesser cold Seeds.

Those of Endive.

Lettice.

Purslane, and,

Succory.

Of the Weights and Measures at present used in the Shops; together with the several Characters of Abbreviation, which occur in Prescriptions.

TH^O it is certainly a Thing of the last Importance to preserve the due Proportions of the several Ingredients of Medicines, yet an Error in this Respect has hitherto prevailed universally. This unlucky Oversight is occasioned by the Use of different Species of Weight in selling different Commodities. Thus Gold and Silver are sold by Troy-weight, and most other Things by what we call Averdupoize-weight. The Pound Troy is divided into twelve Ounces, the Pound Averdupoize into sixteen. But in these Weights neither Pounds nor Ounces are the same, the Pound Troy being much less than the Pound Averdupoize, tho' the Troy Ounce is heavier than that of the other. As the medicinal Pound is divided into twelve Ounces, so the various Subdivisions of the same into Drams, Scruples, and Grains, which the Apothecaries use, are adjusted to the Troy Ounce. But as Druggists and wholesale Dealers sell by the Averdupoize-weight, so the Apothecaries do not generally use Troy Weight for Pounds and Ounces; whence it happens that when some Ingredients are prescribed in Pounds, and others in Ounces, they are not proportion'd to the Intention of the Prescription; and when any Ingredients are ordered in any Subdivision, their small Weights being adapted to a greater Ounce,

than the Averdupoize, these Ingredients must of Course be disproportioned.

Another Error in proportioning the Ingredients of Medicines is the applying the Names of Weights to Measures, tho' the Liquors contained in those Measures have not the Weight implied by these Names.

To prevent the future Inconveniences which might arise from these and other similar Errors, the Compilers of the last *London Dispensatory* have ascertained their Weight, which is that of Troy, and their Measure, which is what we commonly call Wine Measure, in the following Manner.

℔ A Pound,	} contains	{ Twelve Ounces
℥ An Ounce.		{ Eight Drams.
ʒ A Dram.		{ Three Scruples
ʒ A Scruple.		{ Twenty Grains

The Measures most in Use with us are,

A Pint	} contains	{ Sixteen Ounces.
An Ounce		{ Eight Drams.
A Gallon		{ Eight Pints.
A Spoonful		{ Half an Ounce.
A Cyathus		{ An Ounce and an half.

An Explanation of some abbreviated Characters.

Cong. A Gallon.

Cochl. A Spoonful. We must observe, that a Spoonful contains half an Ounce of Syrups; and but only three Drams of distilled Waters.

M. A Handful.

S. V. R. Spirit of Wine, rectified.

C. C. Hart's Horn.

S. a. According to Art.

℥. The Half of any Thing.

F. Form into.

B. M. Water Bath.

P. A Pugil, the eighth Part of a Handful.

P. E. Equal Parts.

C. C. C. Burnt Harts Horn.

q. s. A sufficient Quantity.

ana: of each.

q. v. As much as you please.

B. A. A Sand Bath, or Heat.

B. V. A Vapour Bath.

CH A P. I.

GENERAL RULES for the gathering of SIMPLES.

LET the annual *Roots* be gathered before they shoot out their Stems or Flowers; the biennial principally in the *Autumn* of that Year, in which their Seeds are first sown; and the perennial when the Leaves begin to fall, and therefore generally in the *Autumn*. Having first wash'd away the Filth, and cleared them of their withered and corrupted Fibres, hang them up in a shady, airy Place, that they may dry moderately. Let the thicker be cut in Pieces, either lengthwise, or transversely; preserving the cortical Part, and rejecting the Pith. Those Roots which loose their Virtues by drying should be kept covered with dry Sand.

Let *Herbs* be gathered at the Time of their Vigour, when they have shot into perfect Leaves; but before the Flowers are opened. Of some it is best to take only their flowering Tops. Let them be dried, as is directed above with Respect to Roots.

Let *Flowers* be gathered when they are moderately expanded, upon a clear Day, before Noon; but Roses, for Conserve, in the Bud, before they open.

Let *Seeds* be gathered when ripe, and beginning to dry, before they fall spontaneously: The same is to be observed of Fruits, unless they be ordered green.

Woods for medicinal Uses are best

felled in the Winter; and this is the best Season for shaving off their Barks.

Animals, and *Minerals* should be chose in their utmost Perfection, unless required otherwise.

These are the Rules laid down by the Compilers of the *Edinburgh Dispensatory*, who seem to have consider'd the Subject with Attention, and directed with Judgment and Accuracy.

Preparation of Fats.

The Fat, being first purged of its Membranes, Blood Vessels, and Strings, is to be wash'd in fresh Parcels of Waters, till it will no longer tinge the same Red; then let it be melted, and strained, and preserved from the Injuries of the Air. E.

The Directions of the *London Dispensatory* are to melt the Fats, with the Addition of a little Water, to keep the Fat from burning, or turning black, which they would otherwise be subject to do if the Fire was too intense. But they are first to be chopt into small Pieces, and at last strained when melted. The Fat of a Viper requires only separating from the Intestines with a gentle Heat, and then straining thro' a thin Cloth; no Water being here necessary.

Prepared,

Prepared, or washed Aloes.

Dissolve the Aloes in a sufficient Quantity of Spring-water, over a gentle Fire; then strain it, and throwing away the *Fæces*, evaporate it to the Consistence of Honey. But the purest transparent *Aloes* requires no washing. E.

Prepared Gum Ammoniac.

Dissolve *Gum Ammoniac* in Vinegar, strain the Solution, and afterwards evaporate the Vinegar with a gentle Heat. E.

Preparation of Bees.

Put Bees into a proper Vessel, and dry them with a very slow Heat. E.

Preparation of Bole Armoniac.

Dissolve powder'd Bole, in a sufficient Quantity of Spring-water; stir them well together, and afterwards decant the Water, now saturated with the fine Flower. Pour on fresh Water till the Bole is entirely dissolved, and only the small Sand and Stones are left behind. Mix the several Parcels of turbid Water, together, then suffer them to rest, and the Bole will subside, which, after the Water is poured off, must be dry'd for Use. E.

This is an admirable Way of reducing hard Substances to a fine Powder, and is applicable to many other Parts of the *Materia Medica*, both those which are, and those which are not capable of Solution. But in the Preparation of some which Water will spoil, Spirit of Wine should be substituted in its stead.

Preparation of Toads.

Put live Toads in an earthen Pot, and dry them in an Oven moderately heated to such a Degree as that they may be pulverized. E.

Preparation of Calamine.

Make Calamine thrice red hot,

and as often quench it in Rose-water; then levigate it with the same Water, upon a Porphyry, and afterwards form it into Balls. E.

Care should be taken to powder Calamine finer, or coarser, according to the Uses it is to be apply'd to, for I am inform'd, that the Surgeons have observ'd Calamine finely powder'd, to act as a Sort of Escharotic whereas in a more gross Powder, it operates only as a Dryer. For the latter use, simple Levigation will be sufficient, but for the former it should be treated in the Manner above directed for *Bole Armoniac*. To save the Trouble of calcining Calamine, the London Dispensatory directs that to be procur'd, which is ready calcin'd for the Brass Works.

The Preparation of terrestrious and such other Bodies, as will not dissolve in Water, from the London Dispensatory.

These Bodies are first to be pound'd in a Mortar, then levigated with a little Water upon a hard and smooth Marble into an impalpable Powder, afterwards dried upon a Chalk-stone, and then set by for a few Days in some warm, or at least, very dry Place.

After this Manner are to be reduced into Powder, Amber, Antimony, Bezoar, which should be levigated with Spirit of Wine instead of Water; because this heightens the green Colour, Blood-stone, Chalk, Coral, Crabs-Claws, Crabs-Eyes, Egg-Shells, first separated from the Membrane adhering to them by boiling in Water, Oyster shells, first cleaned, Pearls, Verdegrise, Tutty. The *Spiculæ* of Antimony if not reduc'd to excessive fine Powder, are subject to wound the Coats of the Stomach, Care must therefore be taken to powder it very fine, and the same Caution is requisite with Respect to Tutty, which is principally used for that tender Organ the Eye.

The Calcination of Hartshorn.

Burn Pieces of Hartshorn in a Potter's Furnace, till they become perfectly white; then reduce them to Powder after the same Manner, as other terrestrious Substances. L.

Preparation of Galbanum.

This is prepared in the same Manner as *Gum Ammoniac*.

Preparation of Lapis Lazuli.

Levigate this upon a Porphyry, then wash it several times in Spring-water, and afterwards dry the Powder. E.

Preparation of Litharge.

Litharge is prepared as *Bole Armoniac*. E.

Preparation of Filings of Iron.

Take such Filings of Iron as have been cleans'd by the Magnet, and set them in a moist Place, that they may turn to Rust, which grind to impalpable Powder. They are likewise prepared with Vinegar. They are also prepar'd by exposing the Filings of Iron to the Air, and moistening them with Vinegar or Water, till they are converted into Rust, and then they may be treated, as directed under the Preparation of *Bole Armoniac*. The dry'd Powder is by some called *Alcohol Martis*.

The Despumation, or Clarification of Honey.

Liquify the Honey by a *Balneum* of Water; that is, by setting the Vessel containing the Honey into hot Water; and let the Scum, that rises, be taken off. L.

Preparation of Millepedes.

Let Millepedes be inclosed in a thin Canvas Cloth, and suspended within a covered Vessel over the Steam of hot Spirit of Wine; and

they will soon be killed by the Vapour, and be rendered friable. L.

In the *Edinburgh Dispensatory*, they are directed to be dry'd in a proper Vessel, with a very slow Heat.

Strain'd Opium, or the Thebaic Extract.

Take of Opium cut into small Bits one pound Weight; dissolve it into a Pulp with one Pint or less of boiling Water, taking care to avoid burning; and while it remains quite hot, press it strongly through a linen Cloth from its Dregs; then reduce the strained Opium by a Water *Balneum*, or other small Heat to its first Consistence.

Opium softened in this small Quantity of Water, passes the Strainer unaltered in its Substance, and freed only from Dregs; but if it be dissolved in a large Quantity of Water, the gummy and resinous Parts will divide from each other. L.

After the same Manner the rest of the Gums may be purified, such as *Gum Ammoniac*, *Aia Fœtida*, *Galbanum*, and the like. But a greater Quantity of Water may be safely used. If the resinous Part subsides, let it be taken out, and added towards the Conclusion of the Inspissation, that it may unite with the rest into one uniform Mass. Any Gum, as *Galbanum*, which easily melts, may be purified by including the Gum in a Bullock's Bladder, and retaining it in warm Water, till the Gum becomes soft enough to be separated from its Dregs by pressing through a Canvas Strainer.

Preparation of Opoponax and Sagapenum, according to the Edinburgh Dispensatory.

Opoponax should be prepared as *Gum Ammoniac*; so likewise should *Sagapenum*.

The Extraction of Pulps.

Pulpy Fruits, that are unripe, and those

those which are ripe, if dry, are to be boiled in a small Quantity of Water, till they become soft; then the Pulp is to be pressed through a strong Hair-sieve, and afterwards boiled over a gentle Fire, and continually stirred to avoid burning; till it is brought to a due Consistence: L.

Cassia is also to be boiled out from the Pod or Cane bruised, and reduced afterwards to a just Consistence by evaporating the Water. The Pulps of Fruits, which are both ripe and fresh, are to be pressed out without any previous Boiling. L.

The Torrefaction of Rhubarb and Nutmegs.

Roast them with a gentle Heat, till they become easily friable into Powder. L.

Preparation of Goat's Blood.

About the Beginning of Summer open some proper Artery of a middle aged Goat, and draw out a Quantity of Blood; which, being received in a clean Vessel, is to be dried either by the Heat of the Sun, or a slack Oven. E.

The Baking of Squills.

Enclose the Squill in Paste of Wheat-flower, having first separated the external Skin and the hard Part, from which the fibrous Roots grow; then bake the Squill in an Oven, till the Paste is dry, and the Squill is rendered soft and tender throughout. This Operation is intended to

mitigate the Acrimony of the Squills; but is of very little Use, as it by no Means improves their medicinal Virtues, and only fits it for entering as an Ingredient, into that very trifling Composition the *Venice Treacle*.

The Exsiccation of Squills.

Cut the Squill, after the external Skin has been taken off, transversely into thin Slices; and dry it with a very gentle Heat. By this Method the Squills are said to be sooner dried, than when the several Coats, which compose the Squill are separated from each other.

The Burning of Sponge.

Heat the Sponge in a covered Vessel, till it becomes black, and is easily friable; then reduce it to Powder in a Glass or marble Mortar. By this Method, the Oil and volatile Salt of the Sponge, are preserv'd in the Subject, provided too intense a Heat is not employ'd: A Glass or Marble Mortar, should be employ'd, for reducing it to Powder, when thus calcin'd; for 'tis said that a Brass, or Bell-metal Mortar, will render the calcin'd Sponge offensive to the Stomach.

The Straining of Storax.

Boil Storax in Water, till it becomes soft, then press it out between warm Iron Plates, and separate the Storax now cleared of its Dregs, from the Water. L.

C H A P. II.

Of W A T E R S.

THE incomparable *Boerhaave* having laid down some instructive Rules, for the Distillation of Simple Waters, it will be proper in this Place to take Notice of them, for the Information of those, who

T h a t a r e

are less acquainted with Pharmacy, and of such as have not duly consider'd what medicinal Virtues are to be expected in distill'd Waters. The most commodious Operation for this Process, is that perform'd by a Still-head, closely fitted into the Mouth of a Vessel, so as to collect and condense the Vapour arising by a boiling Heat, and transmit it without Loss into a Receiver. The Design in Distillation is to collect whatever flies off from a recent Plant, by the natural Degree of the Summer's Heat, up to that of two hundred and fourteen Degrees. And for this Purpose we are to make Choice of a sapid and odorous Plant, which contains an inflammable, oily, and a fixable saline Part, as also a saponaceous one, consisting of the two. The Plants design'd for this Operation are to be gather'd when their Leaves are at full Growth, and a little before the Flowers appear, or before the Seed comes on, because the Virtue of the Subject expected in these Waters, is often little, after the Seed or Fruit is form'd, at which Time Plants begin to languish: The Morning is best to gather them in, because the volatile Parts are then condensed by the Coldness of the Night, and kept in by the Tenacity of the Dew, not yet exhaled by the Sun. This is understood, when the Virtue of the distill'd Water principally resides in the Leaves of the Plants, as it does in Mint, Marjoram, Penny-Royal, Rue, and many more; but the Case differs, when the aromatic Virtue is only found in the Flowers, as in Roses, Lillies of the Valley, &c. in which Case we choose their flowery Parts, whilst they smell the sweetest, which should be gather'd before they are quite open'd, or begin to shed, the Morning Dew still hanging upon them. In other Plants the Seeds are to be preferr'd, as in Anise, Caraway, Cumin, &c. where the Herb

and the Flower are indolent, but the whole Virtue remains in the Seed alone, where it manifests itself by its remarkable Fragrance and aromatic Taste. We find Seeds chiefly possess'd of this Virtue when come to perfect Maturity. We must not omit, that these desirable Properties are found only in the Roots of certain Plants, as appears in Avens, and in Orpine, whose Root smells like a Rose; and here the Roots should be gather'd, for the present Purpose, at that Time when they are richest in these Virtues, which is generally at that Season of the Year just before they begin to sprout, when they are to be dug up in a Morning. If the Virtue here requir'd be contain'd in the Barks or Woods of Vegetables, then these Parts are to be chosen for the Purpose.

The Subject being chosen, let it be bruised or cut, if there be Occasion, and with it fill two Thirds of a Still, leaving a third Part of it empty, without squeezing the Matter close; then pour as much fresh Rain Water upon it as will fill the Still to the same Height, that is, two Thirds, together with the Plant: Fit on the Head exactly to the Neck of the Still, so that no Vapour may pass through the Juncture. Let the Joining of the Nose of the Still Head to the Worm, be luted with a stiff Paste, made of Linseed Meal and Water. Observe, that the Cavity of the Worm be always cleansed by passing fair boiling Water thro' it, lest otherwise the distill'd Water should be foul'd. Apply a Receiver to the Bottom of the Worm, that no Vapour may fly off in the Distillation; but that all the Liquor, being cool'd in the Worm-tub, fill'd with cold Water, may be collected, which is best perform'd by keeping the Worm-tub continually supplied with cold Water.

Things being in this State, digest

gest for twenty-four Hours with a moderate Degree of Heat, of one hundred and fifty Degrees. Afterwards raise the Fire, so as to make the Water and the Plant boil; which may be known by a certain hissing Noise, proceeding from the breaking Bubbles of the boiling Matter; as also by the Pipe of the Still-head, or the upper End of the Worm becoming too hot to be handled; or the Smoaking of the Water in the Worm-tub, heated by the Top of the Worm; and lastly, by the following of one Drop immediately after another, from the Nose of the Worm, so as to make an almost continual Stream. By all which Signs we know, that the requisite Heat is given, and if it be less than a gentle Degree of Ebullition, the Virtue here expected will not be rais'd. But when the Fire is too great, the Matter hastily rises into the Still-head, and souls the Worm and the distill'd Liquor; and the Plant being also rais'd, it blocks up the Worm; for which Reason, it is proper to place a Piece of fine Linen, artificially, at the End of the Still-head Pipe, that, in Case of this Accident, the Plant may be kept from stopping up the Worm. But, even in this Case, if the Fire be too violent, it will throw up the Herbs into the Still-head Pipe; whence the Passage being stop'd, the rising Vapour will forcibly blow off the Head, and throw the Liquor and Steam about, so as to do much Mischief, or even to suffocate the Operator, without a proper Caution; and the more oily, tenacious, gummy, or resinous the Subject is, and consequently the more frothy and explosive, the greater Danger there is, in Case of this Accident.

Let the due Degree of Heat therefore be carefully observ'd, and equally kept up, so long as the Water, distilling into the Receiver, is

white, thick, odorous, sapid, frothy, and turbid; for this Water should be kept carefully separated from that which will follow it: Whence the Receiver must be often chang'd; that the Operator may be certain, that nothing but this first Water comes over; for there afterwards rises a Water that is transparent, thin, and without the peculiar Taste and Odour of the Plant, but generally somewhat tartish and limpid, tho' somewhat obscur'd and fould by white dreggy Matter: And if the Head of the Still be not tinn'd, the Acidity of this last Water will cause it to dissolve the Copper, so as to become green, nauseous, emetic, and poisonous to those who use it, especially weak Persons and young Children, as operating both upwards and downwards, with severe Gripings. If such a Misfortune should happen, it is remedied by drinking plentifully of Milk, sweeten'd with Honey, or of the common emollient Decoction.

The first Water above describ'd, principally contains the Oil and distinguishing Spirit of the Plant, and always somewhat saline, which in most Plants is acid, but in the more pungent Antiscorbutics a volatile Alkali; for the Fire by boiling the Subject, dissolves its Oil, and reduces it into small Particles, which are carried upwards by the Assistance of the Water, along with those Parts of the Plant that become volatile with this Motion. And if the Vessels are exactly closed, all these being united together, will be discharged without Loss, and without much Alteration, into the Receiver annex'd; for if we may trust our Senses, those Waters are richly impregnated with the Odour, Taste, and particular Virtues of the volatile Parts of Plants: Hence, if the Botanist justly assigns the Virtues of any Plant, as they are contain'd in the

Part which is volatile by a boiling Heat, the Chymist can present those Virtues separated from the rest. I have expressly observed, that the first of these distilled Waters contains only the Virtues of the Plants, residing in that Part which is volatile with this Heat; because, in the whole mix'd Juice of the Plant, there is a certain Virtue depending upon a Mixture of this first Water, and the Liquor remaining after that is drawn off. The fresh express'd Juice of recent Mint has certainly many more distinct Properties than the distill'd Water thereof; Whence Physicians are to observe, that the Virtues of this Water, and of the native Juice, are not the same, but very different.

The Water of the second Running wants the volatile Part above describ'd, yet scarce brings over the more fix'd Part of the Plant, except what is somewhat acid and vapid: If when this is come off, fresh Rain Water be pour'd upon the remaining Plant, and boil'd therewith, or strongly distill'd, there rises a more acid Water, containing very little of the particular Virtue of the Plant; almost the same Kind of Acidity appearing to rise thus from them all at last. This, says *Boerhaave*, I may venture to affirm upon Experience, that the Virtue of destroying Worms, which many celebrated Physicians have justly attributed to certain distill'd Waters, depends upon this, that the Acid of the Water of the last Running dissolves the Copper, and thus acquires a Virtue not its own. This Operation however, shews, that Plants contain an acid Salt so volatile as to rise and separate from the Subject, with two hundred and fifteen Degrees of Heat. But Experience shews, that the Water of this second Running has scarce any other Virtue than that of Cooling; as may be lately tried

by using a Glass Still-head instead of a Copper one, by which Means the Inconvenience of its dissolving the Copper is prevented.

And this is the best Method of preparing the distill'd officinal Waters, provided the two Sorts be not mix'd together, for both of them would be spoiled by such a Mixture; and will seldom remain perfect a Year.

A slight Fermentation is sometimes necessary, in Order to open the Bodies of some Plants, so as to make them afford their medicinal Virtues in Distillation. For this Purpose,

Take any recent, odorous, and sapid Plant, cut and bruise it, if that seems necessary, put it into a large Oak Cask, leaving a Space empty at the Top four Inches deep; then take as much Water as will, when added, fill the Cask to the same Height, including the Plant, and mix therein about an eighth Part of Honey if it be cold winter Weather, or a twelfth Part if it be warm; in the Summer the like Quantity of coarse unrefined Sugar might, to the same Purpose, be added instead of the Honey, or Half an Ounce of Yeast added for each Pint of Water will have the Effect, but *Boerhaave* prefers the Honey: let the proper Quantity therefore of Honey and Water be warmed, and poured upon the Plant in the Cask; let the Cask stand upright, and have its wide upper Orifice, or Bung-hole, loosely covered with a wooden Cover, then set it in a Heat of about eighty Degrees, which is afterwards to be constantly kept up by covering the Outside with Cloths, and a due Regulation of the Fire, which must therefore be greater, and more carefully attended in cold Weather, but in the Heat of Summer little or no Fire is required. On the second Day a hissing Noise will begin in the Liquor,

Liquor, with Bubbles, Frothing, and a grateful Smell of the Plant, the Plant now rising to the Surface. When this Fermentation has continued so long, that the Plant which was on the Top begins to subside and sink to the Bottom, the Operation is continu'd long enough for our Purpose, so that now the Vessel must be cooled and closely bunged down; for if it should continue longer open in the same Warmth, the Spirit and Oil now render'd more volatile, would fly off, and the Virtues requir'd be lost; so that the Matter should be now directly distill'd. Take therefore as much of this Plant and its fermented Liquor as may fill two Thirds of a Still, and work carefully from the first; for the Liquor, containing much fermenting Spirit, easily rarifies with the Fire, froths, swells, and hence becomes very subject to boil over. And as all this happens much quicker in this Distillation than in the Distillation of an unfermented Plant, we ought here to work slower, especially at the first. And thus there will come over first a limpid, unctuous, penetrating, odorous, lapid Liquor, all which is to be kept separate; there follows a milky, opake, turbid Liquor, still containing something of the same Taste and Odour; and at last comes one that is thin, acid, not fragrant and scarce having any Resemblance of the Plant. There remains in the Still an Extract, insipid with respect to the Plant, and retaining most of the Substance of the Honey. And all these Particulars hold, when the Fermentation is continu'd till the Plant spontaneously falls to the Bottom of the Cask; which, with the above-mention'd Degrees of Heat, usually happens in five or six Days. This first Water, or rather Spirit, may be kept for several Years, in a close Vessel, without changing or growing ropy. It also excellently

retains the Taste and Odour of the Plant, though a little altered; but if less Honey were added, less Heat employed, or the Fermentation continu'd only two or three Days, then the distilled Water of the first Running would be white, thick, opake, unctuous, frothy, and perfectly retain the Scent and Taste of the Plant, or much less altered than in the preceding Case; though the Water will not be so sharp and penetrating. After this is drawn off, a tartish, limpid, inodorous Liquor will rise. There is also in this Case, always found some Oil in the first Water, which was not in the former Spirit. Again, if the Fermentation were to continue only for a Day or a Day and a Half, the Water that first comes over would abound largely with Oil. In other Respects Matters are nearly the same in both; for it is constantly found, that the longer the Fermentation is continu'd, the less Oil appears in the distilled Water, and therefore what runs first is always clearer and stronger; but upon mixing with common Water, the whole immediately becomes milky; whence these Waters greatly differ from one another, accordingly as they are differently prepar'd in the above-mentioned Respects. When the Fermentation is perfectly perform'd, the first Water will be limpid, the second milky, and if the third be forced over by a strong boiling Heat long continued, it will prove acid and limpid, resembling distilled Vinegar. The Extract in this Case will always be the less impregnated with the Virtue of the Plant employed, the longer the Fermentation was continued, or the more perfectly it was performed, and *vice versa*; the Oil also, which in the other Method of distilling Water, floats upon the Surface of the Water, becomes so attenuated when the Plant is perfectly fermented

before Distillation, as intirely to disappear and lye concealed in the distilled Liquor; which may therefore be called Spirit, rather than Water. That this is the Case appears from hence, that if a large Quantity of Water be added to the Spirit, it presently grows white; which shews that there was Oil concealed in it: And, frequently, little Drops of Oil thus regenerated, will float upon the Surface of the Water.

Hence we learn that this Fermentation, when perfectly finished in the proper Time required for that Purpose, with a large Proportion of Ferment, and if the whole fermented Matter be for some Time contained closely bunged down in a Cask, affords these Waters extremely limpid, hot, aromatic, odorous, sapid, and penetrating without any Sign of their containing an Oil: and according as these Properties appear more in the Water, the native Virtues of the Plant are more changed; so that at last they can scarce be known; but when the Fermentation is perfect, each losing its proper Character they all become nearly alike. The Water of *Carduus Benedictus*, so prepared, is highly recommended, where Sweating and Perspiration are required.

Hence the Taste and Smell of Plants, communicated to their distilled Waters, principally depend upon their native Spirit respectively. But, as this Spirit is wrapped up in a tenacious Oil, when this Oil is mixed with the Waters, it renders them more odorous and sapid, in the larger Quantity it is so mixed. This Oil is gradually thin'd, made less tenacious, more spirituous, and easier to mix with Water, by Distillation, Digestion and Cohobation in close Vessels, but thus the Spirit also becomes more volatile and disentangled, so as easily to fly off, unless it is every Way very closely confined in

the Vessels during the Distillation, which being performed, highly efficacious Waters may be thus prepared. But as Fermentation requires a Length of Time, the Admission of the Air, and open Vessels, it attenuates Oils by its Motion, so as to mix them with Water, and in this Form make an inflammable Liquor, which cannot happen without a Dissipation of native Spirit. It however renders Oils miscible with the animal Juices, and fit to enter the finest Vessels, but always destroys the peculiar Virtue of the Plant; in the mean Time, it proves the Medium of conveying, stimulating and grateful Virtues to the Nerves, especially those of the Nose, Mouth, Jaws, Throat, Stomach and Intestines.

The *Edinburgh Dispensatory*, orders simple Waters to be distilled from the following Vegetables,

Angelica.
Baum.
Black Cherries, with their Stones crack'd.
Camomile Flowers.
Carduus Benedictus.
Elder Flowers.
Fennel.
Hyssop.
Mint.
Mugwort.
Parsley.
Penny-royal.
Red Poppy Flowers.
Rose Buds.
Rue.
Savine.
Common Wormwood.

Aqua Alexiteria.

Alexiterial Water.

Take of the fresh Leaves of *Carduus Benedictus*, Baum, and *Scordium*, each ten Ounces; those of common Wormwood

and Mint, each fix Ounces ; and those of Angelica, three Ounces ; add two Gallons of Spring Water, and distill according to the Rules of Art. But observe that the Water thus obtain'd will be the better, if the *Carduus*, Wormwood, and *Scordium* be first fermented. E.

In the *London* Dispensary, this Water is different from the former, and is order'd to be prepar'd thus.

Take of the green Leaves of Spear Mint, a Pound and a Half ; the Tops of Sea Wormwood also green, the green Leaves of Angelica, of each a Pound ; of Water as much, as is sufficient to prevent burning. Distill off three Gallons.

These differ from the Alexiterial Milk Water of the former *London* Dispensary, as much as they do from each other. But they are all so excessively insignificant, that it would be trifling to determine which is best. Neither can be depended upon for curing any one Distemper, or alleviating any one Symptom. And they can be only us'd judiciously, as Vehicles to Things of greater Consequence.

Aqua Castorei.

Water of Castor.

Take of *Russia* Castor, one Ounce ; of Water as much, as is sufficient to prevent burning. Distill off a Quart. L.

This Water will be pretty strong of the Castor, and may serve as a Vehicle to other Medicines, in Cases where Castor can be serviceable, as in those Distempers which are improperly and, I may say, unintelligibly call'd *nervous* ; but in these Cases Castor answers much better Purposes,

given in Substance, and without any Inconvenience, which the Water has not equally.

Aqua Cinnamomi sine Vino.

Cinnamon Water without Spirit.

To a Pound of Cinnamon add twelve Pints of Spring Water, and let them sleep together for two Days ; then draw off the Water till it ceases to run milky. E.

We are inform'd, that the Shops have been us'd to substitute *Cassia* for Cinnamon in this Water, an unpardonable Imposition, in those who are so well paid for their Time and Labour, as those are who deal in it. This should seem to be the very best simple Water we have ; and the Virtues thereof may be understood from those of Cinnamon. It is advis'd to add an Ounce of white Sugar Candy to every Pint of this Water, to prevent the Separation of the ponderous Oil ; and by this Means it is said to keep longer.

Aqua Corticum Aurantiorum simplex.

The simple distill'd Water of Orange Peel.

Take of the outer yellow Rind of fresh *Seville* Oranges four Ounces, of Water as much, as is sufficient to prevent burning. Distill off a Gallon. L.

In the Plan for the *London* Dispensary, a Water was directed to be distill'd in the same Manner from Lemon Peel, which was, I presume, left out, because it loses its Flavour sooner than that of Oranges. Both should seem to be good simple Waters, as being impregnated with the Virtues of the Simples, an Account of which see under the Article of Vegetables.

Aqua Menthae Piperitidis simplex.

Simple Pepper Mint Water.

Take of the Leaves of Pepper-Mint dried, a Pound and a Half; of Water as much as is sufficient to prevent Burning.

Distill off a Gallon. L.

This has been long kept in the Shops, but was received in the last London Dispensatory for the first Time. It is a very fashionable Water, and may be us'd properly as a Carminative, in Case of Flatulences in the Stomach, or whenever this Organ is intended to be warm'd, being very hot and pungent. But I don't believe it capable of curing any Distemper, tho' it may relieve a Symptom.

Aqua Piperis Jamaicensis.

Water of Jamaica Pepper.

Take of Jamaica Pepper, Half a Pound; of Water as much, as is sufficient to prevent Burning.

Distill off a Gallon. L.

The Virtues of this Water may be learn'd from those of the *Pimenta*, which see under the Article *Caryophyllus*, amongst the Vegetables.

Aqua Ranunculi pratensis.

Water of Meadow Crowfoot.

Take of the Leaves and Flowers of the *Ranunculus pratensis*, or Meadow Crowfoot. Let them be distill'd in a common Alembic, in the same Manner as common simple Waters, as long as any Pungency remains in the Liquor. The distill'd Water is very hot and pungent, and requires lowering with common Water, till it may be drank. The Method of taking it is, to fill the Stomach first with about a Quart of warm Water; then give an Ounce of the Liquor, which in a few Minutes brings up the Water without any Violence. This is to be repeated, till the Patient has vomited sufficiently.

There is, or at least was very lately,

a Man in *Cheshire*, commonly call'd the Vomiting, or Straw Hat Doctor, who render'd himself famous for exhibiting a particular Sort of Emetic, which he kept as a Secret; but I am inform'd, that this is his Vomit; and my Authority for this is very good. This Vomit has the Reputation of operating very soon, with great Ease and good Effect.

Aqua Rosarum Damascenarum.

Damask Rose Water.

Take of fresh damask Roses six Pounds; of Water as much as is sufficient to prevent Burning. Distill off a Gallon. L.

Aqua Seminum Anethi.

Water of Dill Seed.

Take of Dill Seed one Pound; of Water as much as is sufficient to prevent Burning. Distill off a Gallon. L.

For the Virtues of this Water, see those of Dill-Seeds, under the Article *Anethum*.

To these may be added, tho' 'tis rather procured by Resolution than Distillation.

Aqua Spermatis Ranarum.

Frog Spawn Water.

Hang any Quantity of Frog Spawn, in a Bag, so that the Water may run from it, into a Vessel set underneath to receive it, and to every Pint of the Liquor, thus obtained, add a Dram of Roch Alum. E.

This seems intended as a Cooler, but does not promise any great Effects, except such as is communicated to it from the Alum.

The *Edinburgh* Dispensatory informs us, that the Waters of such Plants, which are obtainable to no good Purpose by Distillation, may be made by dissolving a proper Proportion of their essential Salt in Spring Water.

Another

Another Method may be contriv'd of supplying the Place of simple Waters, thus, Grind an Ounce of dry loaf Sugar, to an impalpable Powder in a glass Mortar, with a glass Pestle, and by Degrees add thereto a Dram of an essential Oil, or Half a Dram, if the Oil be very tenacious, and continue rubbing them together, till all the Oil be thoroughly mixed, and drank into the Sugar; the Oil, in this Operation, usually diffuses a Fragrancy to a great Distance, whence the Operation should be performed quick, and the Mortar be covered with a Cloth surrounding the Pestle. If a little fresh Yolk of Egg be added in the Grinding, and mixed in with the Sugar and Oil, the Oil thus becomes more easily miscible, but the Mixture will not thus keep so long without turning rancid. If a due Proportion of such an *Eleosaccharum* be dissolv'd in Water, this Water will be impregnated with the Smell and Taste of the Plant from whence the Oil was distill'd; that is, with the distinguishing Spirit of the Plant, which communicates to the distill'd Water all its Virtues. But if such an *Eleosaccharum* be dissolv'd in the distill'd Water of the same Plant the Oil was procur'd from, and the spirituous Water and Syrup of the same be added to it, this Mixture would be more impregnated with the Virtues of the Plant. And thus if the Virtues of Vegetables were accurately determin'd, Medicines of considerable Effects might be prepar'd.

With Respect to Simple Waters, the *London Dispensatory*, directs to add to them, about a twentieth Part of Proof Spirit in order to make them keep the longer. And we are farther there told, that the Herbs, if they are of prime Goodness, are to be taken in the Weights directed for each. Where green are prescribed, such are to be used. But in some of the Waters dry Herbs are allowed,

because they are to be had at all Times of the Year, though green Plants afford rather the more elegant Waters. But the Weights here directed should be varied by the Judgment of the Operator, not only when green are used instead of dry, but whenever the Plants by a less favourable Season are weaker in Flavour.

The general Rules laid down in the *Edinburgh Dispensatory* for the Distillation of Simple Waters are, To use the Plants from whence they are distill'd, fresh gather'd; then bruise them a little, and let thrice their own Quantity of Spring-water be pour'd thereon; but less will suffice in Case they are juicy, and if dry, they must have a greater Quantity; for every Pint of Water thus added, draw off half a Pint, by the Alembic, with its Refrigeratory; the Junc-tures being first luted. But black Cherries require no Water to be added to them. Those Plants which abound with an aromatic and fragrant Oil, should be immediately committed to Distillation: But those that contain a more fix'd Oil, or owe Part of their Virtues to a Kind of volatile Salt, such as Wormwood, *Carduus Benedictus*, Mugwort, Chamomile, and some others, ought first to undergo an imperfect Fermentation, with Yeast; that is, they should be distill'd in the Beginning of the Fermentation, without staying till it is finish'd. If any Drops of Oil float upon the Surface of the Water, they must be carefully taken off.

As to the black Cherry-water now left out of the *London Dispensatory*, tho' I esteem it so insignificant, as to be not worth commenting upon; yet I must remark, that according to the best Information I could procure from those who had made Experiments with it upon Animals, purposely to discover its Effects, it is absolutely innocent, and attended with no ill Consequences whatever.

With Respect to the medicinal Vir-
tues

tues of Simple distill'd Waters from Vegetables, I must remark, that as they are at present used, the Patient would receive no Injury in his Health or Constitution, if most, or perhaps all of them, were omitted in the Dispensatories; for they are generally employ'd as the Basis of a *Ju-lap*, or Draught, with an Addition of an equally insignificant compound Water, and some Syrup or Sugar; and are given in such Doses, as it is unreasonable to expect any Manner of Effect from, except that of making the Patient believe it may do him Service, because it tastes more like Physic than common Water, or Wine and Water, tho' the last is frequently a much better Medicine. The College have, therefore, very well answer'd the Trust repos'd in it by the Legislature, in expunging many of the Simple Waters to be found in former Dispensatories. And I think the End, if any End is propos'd, of all or most of them as commonly used, will be better answer'd by an extemporaneous Infusion of the recent Plant in cold Water, or one of the dry'd Vegetables in warm Water in a close Vessel, like *Tea*; for thus the Water will be impregnated with the distinguishing Spirit of the Plant. And I know that a slight Infusion of recent Mint has been commonly sold for the distill'd Water of that Plant, and been universally esteem'd better than any other. Notwithstanding what I have said, I believe the distill'd Water of Plants may exert very great Efficacy in the Body, and contribute to the Cure of many Distempers, if exhibited properly, that is, in Quantities sufficient to answer the End propos'd, and unmix'd with other Ingredients which may interfere with their Operation.

But whatever Virtues distill'd Waters may be possess'd of, they will be found in the greatest Perfection in the Water made by repeated Cohobations, thus:

Take the Plant and Liquor, remaining in the Still after the Distillation of an unfermented Plant, and press them strongly thro' a Strainer, that all the Decoction may be obtained, and with this mix all the Water before drawn over. Return this Mixture into the Still, and add to it as much of the same recent Plant as was employed before, and if necessary, add likewise as much Water as may make up the former Proportion to the Plant. Now close the Vessels exactly and digest the whole with a hundred and fifty Degrees of Heat for the Space of three Days and three Nights, that the Herb being so long steep'd in its own Liquor, may be opened, loosened, and disposed the easier to part with its Virtues. This Digestion being so long continued, is of great Service, but if protracted too long introduces a Change tending to Putrefaction. Let the Water be now distilled off as the first Time, only proceeding more cautiously and somewhat more slowly at first; because the Liquor in the Still being now thicker more impregnated with the Plant, and therefore more flatulent and subject to swell upon feeling the Fire, it easily boils over; but after about one half of the expected Water is come off, the Fire may be prudently raised, and the Distillation be continued so long as the white, thick, odorous, and sapid Water comes over, and then the Operation must be immediately stopped. The Water so obtained will be whiter, thicker, more odorous, sapid, frothy and turbid than that of the first Distillation of the Plant.

This Water preserves its Virtues much longer, and contains it in greater Perfection than that from a single Distillation of the Plant, which shows us the Way of concentrating the peculiar Virtue of Plants, so far as it resides in their volatile odorous Parts. So likewise the remaining Decoction

In this Process is much stronger than in the first Distillation, and as the Operation may be repeated as often as one pleases, both the Water and Decoctions may by several Repetitions, at length may be made extremely rich, so that by this Means excellent Medicines are procurable. Thus in the Year 1730, *Boerhaave* says, he distilled Baum after this Manner fourteen times successively and found the Water at last had a balsamic Taste and the perfect Fragrance of the Plant, so as to prove highly refreshing even when barely smelt to or tasted: And no wonder, since the Virtue of many large Baskets of Baum were here concentrated and brought within the Compass of a small Glass, and the Remainder, also, at the Bottom of the Still being inspissated, fill'd but another Glass and proved grateful, austere, and strengthening, so that by mixing the two together, the Virtues of the Plant, might be thus highly concentrated, or brought into a very little Room. This Process therefore does not only afford excellent Waters, but admirable Extracts also, which when properly mixed together, yield Medicines of such Efficacy as can scarce otherwise be imitated; for the native Virtues of Vegetables are little changed in this Operation, certainly less than in others, tho' it must be allowed that some Alteration is produced by so long a Continuation of the Boiling. But both the Odour, Taste, and Effects demonstrate, that the Waters thus prepared retain in a high Degree, the specific Virtues of the Plant. And hence it is certain, that the medicinal Virtue of truly aromatic Vegetables, resides in that Part of them which rises with the Heat of boiling Water, and that it is possible by Art, to concentrate these Virtues so that they shall prove much more effectual than in the State they are naturally afforded, nor is there any Limitation; for by continuing

the Operation, the Virtue of Plants may be thus exalted to any Degree the Artist shall think proper.

Paracelsus assures us he found by Experience, that Baum is possessed of so great a specific Virtue, as by insinuating into the Humours of the Body, to restore a new youthful Vigour to the Aged, and by this Means perfectly to cure the Gout, and *Isaac Hollandus* avouches the same. Now if these Authors said true, I judged, says *Boerhaave*, that I might by Means of the present Process procure the united Virtues of the Plant in their utmost Strength; and indeed, I have, says he, in myself experienced extraordinary Effects of the Water so prepared, by taking it upon an empty Stomach, and certainly it has scarce its Equal in hypochondriacal and hysterical Disorders, a Chlorosis and Palpitation of the Heart, as often as these Diseases proceed rather from a Disorder of the Spirits, than any Collection of morbid Matter, tho' it is indeed expensive. He tells us he has reduced dried Mint by three or four Cohobations, into a Balsamic penetrating Liquor, which becomes an incomparable and present Remedy for strengthening a weak Stomach, curing Vomiting proceeding from a cold viscid Phlegm lodged about the Mouth thereof, as also in Lienteries. The Water, he says, he has in this Manner prepared from Lemon-peel has, by its fragrance, its agreeable penetrating and highly aromatic Taste and Virtue, immediately cured Flatulencies, Deliquiums, Faintings, and irregular Motions of the Heart, tho' taken in a very small Dose. The like Water prepared by repeated Cohobations from recent Wormwood, has successfully supplied the Want of Bile in the Body, stimulated all the languid Vessels that assist in forming the Chyle, and killed and expelled Worms. The like Water from the Leaves of Savine has given an almost incredible Motion to the whole ner-

nervous System, so as to prove the most excellent of all Medicines for promoting the Exclusion of the Fœtus and Discharge of the Menfes and Hemorrhoids. The cohobated Water of Rue can never be sufficiently recommended for the Cure of the Falling Sickness, the hysteric Passion, for expelling Poison and promoting Sweat and Perspiration. Not to mention the Waters made from the Berries of the Juniper Tree and the Leaves of the *Arbor Vita*, both of them successfully curing the Dropsy, as that from Camomile Flowers cures tertian Agues.

These are the Virtues ascrib'd by that excellent Chymist and Physician *Boerhaave*, to the cohobated Waters of some Vegetables; and as he was too penetrating to deceive himself, and too honest to lead others into Errors in so material a Point, I am inclin'd to believe him. It is therefore, Pity that the Gentlemen who were concern'd in compiling the last *London Dispensatory*, did not direct Waters prepar'd in this Manner from Vegetables of known Efficacy, to be kept in the Shops. It must be confess'd these Waters would have been somewhat expensive, and might have diminish'd the Profit of the Vender, especially as the Repetition of the Doses need not have been so frequent nor so long continu'd. But this is no Objection to their Use in a Country where the Physician is so liberally paid for his Care, and the Compounder for his Trouble.

I shall conclude the present Article of simple Waters, with some admirable Rules for making them from the above quoted Author.

Let the aromatic, balsamic, oleaginous, resinous, gummo-resinous, and strong smelling Plants, which long retain their natural Fragrance; such as *Arbor Vita*, Baum, Bay, Hyssop, Juniper, Marjoram, Mint, *Origanum*, Penny Royal, Rosemary, Sage, &c. be gently dried a

little in the Shade, then digest them in the Quantity of Water already mentioned for twenty-four Hours, in a close Vessel, with one hundred and fifty Degrees of Heat, and afterwards distill in the Method above delivered, and thus they will afford excellent Waters.

When Waters are to be drawn from Barks, Roots, Seeds, and Woods that are very dense, ponderous, tough, and resinous, let them be digested for three, four, or more Weeks with ninety-six Degrees of Heat, in Vessels perfectly closed with a proper Quantity of Salt and Water, to open and prepare them better for Distillation. A considerable Quantity of Sea Salt, is here added partly to open the Subject the more, but principally to prevent Putrefaction, which otherwise would certainly happen in so long a Time, and with such a Heat, as is necessary in this Case, and so destroy the Odour, Taste, and Virtues required. And thus for Example may Waters be prepared from Aloes, Box, Cedar, Guaiacum, Juniper, Rhodium, and the like Woods.

Those Plants which diffuse their Odour to some Distance from them, and thus soon lose it, should immediately be distilled after being gathered in a proper Season, without any previous Digestion; thus Borage, Bugloss, Jessamin, White Lillies, Lillies of the Valley, Roses, &c. are hurt by Heat, Digestion, and lying in the Air. Some Woods are also injured in the same Manner; thus the Shavings of Sassafras, by being boil'd in Water, soon lose their Virtue, Taste, and Smell.

The Astringent, nutritive, healing, consolidating, emollient, farinaceous, gelatinous, cooling and styptic Virtues of Plants are never, by these Means, communicated to the distilled Waters, but are to be sought either in the whole Plant, or its most fixt Part. Whence Pharmacy

macy should be relieved from the unnecessary Trouble of preparing such Waters, and on the other hand, Physicians are diligently to be admonish'd to seek for such Virtues in the Infusions, Decoctions, and Extracts of such Plants. Would it not be ridiculous to expect any Thing nutritive in the indolent and vapid distill'd Water of Barley, or minced Capons Flesh? Can any Man expect to find the excellent Virtues of Sorrel in hot, lax, putrid and bilious Constitutions, from the distilled Water of this Plant? So again it were absurd to attribute the inimitable Virtues of Plantain to its distilled Water; such idle and childish Trifles are therefore to be rejected in the serious Arts of Chymistry and Medicine.

The Case is far otherwise in those Plants whose real Virtue resides entirely in that Part which is separable by Heat not exceeding 214 Degrees; for the Waters carefully prepared from these will contain all the Virtues which is lost in their Decoctions and Extracts. The celebrated Virtues of Lavender Flowers, Lillies of the Valley, and of Rue, against that Species of the Falling Sickness which proceeds from a Disturbance in the Motion of the nervous Fluid, reside in the distilled Water; but are absolutely wanting in the Decoctions or Extracts; so, on the other hand, the antiepileptic Virtue of Piony remains in the Decoction, but is wanting in the Water.

There are some medicinal Plants whose Virtues reside in a Part which is volatile, with the aforesaid Degree of Heat, but so, that after they are raised by Distillation, the remaining Plant and its Decoction continue possessed of other Virtues of great Medicinal Efficacy. Such Decoctions are not therefore to be thrown away, but to be inspissated with a moderate Heat that they may be kept uncorrupted; for being afterwards mixed

with the distilled Water, the Virtues of both are thus united, and afford the whole Efficacy of the Plants; and of this Kind are Chamomile, Carduus Benedictus, the lesser Centaury, Germander, Ground Pine, Mugwort, Rosemary, Sage, Scordium, Wormwood, &c. This Tribe of Herbs indeed are exalted by Fermentation, so as to afford the better Waters; but when their Decoctions come afterwards to be inspissated, they either have less, or a different Kind of Virtue from the natural.

Acid, bitter, austere, sweet, and flat Tastes rarely ascend from Plants in Distillation, but commonly remain in their Extracts, though they ascend from Chamomile, Wormwood, and a few more; but the Colour of the Plants is scarce ever raised by Distillation, though we have a blue Colour in the Distillation of Chamomile, and a green one in that of Wormwood; but these Colours are rather in the Oils than in the Waters. The saponaceous Virtue consisting in the Union of the Salt and Oil never rises, but remains in the Extracts; and therefore Plants endowed with this Virtue are not to be thus distilled.

The following Vegetables scarce afford any Thing of Use in their distilled Waters, that is Barberry, Beet, common Cherries, Colewort, Currans, Elder Berries, Endive, ripe Grapes, Ladies Mantle, Lettice, the Juice of Citrons, Lemons, Oranges, Purslain, Scorzonera, Sorrel, Strawberries and Succory. There are also very contrary Virtues in the same Plant; thus the distilled Water of Cinnamon of the first running is deobstruent, heating, enlivening, stimulating and good in Vomiting; but that of the second Running, astringent cooling and nauseous, whilst the Decoction remaining in the Still is of a dark red Colour, opaque, thick, of an austere Taste, astringent, coagulating, and strengthening.

C H A P. III.

Of Compound or Spirituous W A T E R S.

COMPOUND or spirituous Waters in general are only Brandy impregnated with medicinal Ingredients which contain some Parts so volatile as to rise with the Spirit in Distillation, and come over into the Receiver, so as the distill'd Water may be impregnated therewith. As to their Uses in Medicine, they appear to me not very extensive. For there is scarcely one Ingredient in their Composition which may not be given in Substance to much greater Advantage. Besides, I have a capital Objection against their principal Ingredient, Brandy, and am convinc'd, that if they are given in Quantities sufficient to answer any Intention, the Brandy will do more Injury than the other Ingredients can countervail; for Brandy is known to have a very bad Effect on the Stomach, and to coagulate the Blood: And if they are given in so small Quantities, or so much diluted as to do no Mischief, they can have no Effect at all, and are given to no End or Purpose. In Fevers and Inflammations, which make at least three Fourths of the Distempers which occur, all Sorts of Drams, for compound Waters are nothing more, must be attended with very bad Consequences, as they make the Heat contract more forcibly, and frequently, and render the Circulation more rapid, in consequence of which the Heat and Fever is increas'd; but at the same Time it must be confess'd, that they raise the Spirits, and are therefore pleasing to the Patient and Prescriber; and this is a Circumstance much in their Disfavour; for hence being tempted to regard the immediate Relief only,

without considering the Consequences, People imperceptibly acquire a Habit of recurring to Cordials, till at last they cannot subsist without them, and then the Constitution is on the Verge of being totally and irretrievably destroy'd. I am afraid, that the Practisers of Physic have inadvertently been instrumental, by giving compound Waters as Medicines, in introducing the execrable Custom of drinking Drams, which at present does not only prevail amongst the Vulgar, but has made no small Progress among People of Rank and Distinction; insomuch that if it increases for forty Years more, in Proportion as it has done for the last half Century, there will be no Occasion for a second Deluge or a Conflagration, to exterminate the whole human Species from the Face of the Earth. For those who are habituated to Drams in a certain Degree, cannot long subsist themselves, and are absolutely depriv'd of all Hopes of leaving behind them a tolerably healthful Progeny. I must not omit to take Notice, that most acute Distempers are terminated or much reliev'd, by spontaneous and critical Sweats: Now 'tis obvious to the Observation of almost every one, that Brandy prevents, or checks Sweating, probably by coagulating the Blood; and if so, it must be improper in acute Distempers, when Sweating may be expected to relieve. It may be said, that compound Waters are generally given so much diluted, as not to be capable of checking Sweats; but if they are exhibited so as to act at all, the Effects will be such as I have above-mention'd; but if they are taken so much diluted

as to exert no Manner of Efficacy, in this Case they are absolutely insignificant, and of no Service to any one but the Compounder; and their Exhibition betrays the Want of true medicinal Knowledge in the Prescriber, or something worse. If Cordials are wanting in Distempers, Wine is the most natural, and infinitely the best; and no Case can happen where Cordials can be requir'd stronger than some Sorts of Wine; but when Wine alone is too powerful, it may be diluted at Pleasure, with some proper Water, or Decoction. Add to this, that some Kinds of Wine, as *Rhenish* and *Moselle*, are admirable Medicines, when mix'd in due Proportion with some proper farinaceous Decoction, and exhibited frequently, and plentifully to the Patient, at the same Time that they answer all the good Purposes of Cordials. It must, however, be confess'd, that Cordial Waters may sometimes have their Uses, by removing a present Symptom, in Faintings and excessive Languors, without contributing in the least to the Cure of the Distemper which excites them. But for these Purposes the Gin-shops can furnish Medicines equally efficacious with those of the Apothecaries.

General Rules for distilling compound Waters.

I. The Plants, together with their Parts, should be moderately and newly dried; except in those Cases when they are order'd fresh and green.

II. After they have been duly macerated, such a Proportion of Spring Water should be added thereto, as may prevent any *Empyreuma*, or burnt Flavour from the Still, or somewhat more.

III. The Liquor that runs off first in Distillation, is sometimes kept separate, under the Title of *Spirit*;

and the succeeding Part artificially fined down or freed from its Milkiness: But the best Way is to mix the several Runnings together, without Clarification; so as that the Waters may contain the full Virtues of the respective Plants, without regarding their Cleanness or Beauty.

Dr. Fuller advises to have all compound Waters made with highly rectified Spirit of Wine, and pure Water; by which Means not only the Composition will be untainted with the nauseous and fetid Phlegm, constantly remaining in Brandies, and the common Spirits sold by Distillers; but also a certain Rule will be had for making the same Waters, at all Times and Seasons, of the same Degree of Strength, and that too at a cheaper Rate, than by trusting to what the Distillers call Proof Goods; since one Gallon of well rectified Spirit of Wine will give three of a compound Water, as the Doctor judges, sufficiently strong.

Aqua Absinthii composita.

Compound Wormwood Water.

Take of *Calamus Aromaticus* the fresh external Rind of Oranges, and Cinnamon, each four Ounces, the Leaves of *Roman Wormwood*, half a Pound; of *Garden Mint* three Ounces; the lesser Cardamoms and Mace, each one Ounce: Slice or cut those Ingredients that require it, bruise the others, and pour thereon two Gallons of *French Brandy*, let them macerate together for four Days, then draw off two Gallons. E.

This is intended as a Stomachic and Cardiac, that is a Cordial, and seems well contriv'd for that Purpose, so as to give Relief in Languors, Fainting and Flatulences. Many of the Gin shops are furnish'd

U u

with

with a Dram not much unlike this, which they sell very cheap, to the great Comfort of the Basket Women about *Covent-Garden*.

Aqua Alexiteria Spirituosa

Spirituos Alexiterial Water.

Take of the green Leaves of Spear Mint, half a Pound, the green Leaves of Angelica, the green Tops of Sea Wormwood, of each four Ounces; of Proof Spirit one Gallon, of Water as much, as is sufficient to prevent burning, distill off one Gallon. L.

This seems to be intended as a Cordial and Stomachic. The particular Virtues, if any, may be learn'd from those of the Ingredients which enter its Composition, and from what has been said of Cordial Waters in general.

Aqua Alexiteria Spirituosa cum Aceto.

Spirituos Alexiterial Water with Vinegar.

Take the green Leaves of Spear Mint, the green Leaves of Angelica, of each half a Pound; of the green Tops of Sea Wormwood, four Ounces; of Proof Spirit one Gallon; of Water as much, as is sufficient to prevent burning. Distill off one Gallon; and then add one Pint of Vinegar

This should seem to be a much better Water than the preceding, for the Vinegar will prevent the Spirit from doing so much Injury as it might do without it; and indeed with this Addition, it may possibly do some Service.

Aqua Anhaltina.

Anhalt Water.

Take of the best Turpentine half a Pound, of Olibanum one Ounce; Wood of Aloes reduced to Powder three Drams; Grains of Ma-

stich, Clove-gilly-flowers, or Rosemary-flowers, Nutmegs, Cubebs, or Galangals, and Cinnamon, each six Drams; Saffron two Drams and an half; Fennel-seeds, and Bayberries, each half a Dram. Reduce all to Powder, and digest in five Pints of Spirit of Wine for six Days, adding fifteen Grains of Musk tied up in a little Bag; then distill in a slow *Balneum Mariæ*, separate what is clear from what is turbid.

N. B. 'Tis better to put the Musk in the Beak of the Alembic.

This Water warms, dries, discuses, increases the Strength of the Heart, Stomach, and other Viscera; for this Reason it is thought good in Faintings and Deliquiums. But it is more frequently used externally, and said to be of great Service in Catarrhs and Pains arising from a cold Cause, in the wandering Gout, in Palsies, Epilepsies, Apoplexies, Vertiges, Tremors, and Lethargies, by rubbing the affected Part well with it. This Water often occurs in the Writings and Prescriptions of foreign Physicians, and is much esteem'd abroad as a Cordial.

Aqua Bryonia composita.

Compound Bryony Water.

Take of Bryony Roots, one Pound; those of wild Valerian, four Ounces, the Leaves of Pennyroyal and Rue; of each half a Pound; the Leaves of Mugwort, the Flowers of Feverfew, and of the Tops of Savine, each an Ounce; the external Rinds of fresh Oranges, and the Seeds of Lovage, each two Ounces; upon these Ingredients, when duly cut and bruised, pour two Gallons and a half of French Brandy; then let them macerate together for four Days, and afterwards draw off two Gallons and a half. E.

This

This is intended as a nervous and antihysterical Medicine, and is said to promote the uterine Discharges, to accelerate Delivery, and relieve Convulsions in Children. But I must confess I have never observ'd any Effects either from this, or any other of the Bryony Waters, of consequence enough to make it much regarded. But I have known many hysterical Women taught to drink Drams, and in consequence thereof absolutely destroy'd, by taking Bryony Water as a Medicine.

Aqua Cinnamomi cum Vino.

Cinnamon Water with Spirit.

Infuse a Pound of Cinnamon in a Gallon of French Brandy, and distill off the Water as the *Aqua Cinnamomi sine Vino*. E.

This should seem to be the very best and most useful of the spirituous Waters. The particular Virtues may be learn'd from those of Cinnamon. It sometimes happens that the Peruvian Bark will not stay on the Stomach, but be discharg'd by Vomit, or run off by Stool. In such Cases, I have often known it retain'd by taking it with strong Cinnamon Water.

Aqua Corticum Aurantiorum spirituosus.

The spirituous Water of Orange Peel.

Take of the outer yellow Rind of fresh Seville Oranges, half a Pound; of Proof Spirit a Gallon; of Water as much as is sufficient to prevent burning. Distil off a Gallon. L.

The Virtues of this Water may be learn'd from those of Orange Peel. There is a Dram exactly resembling this sold in the Gin-shops by the Name of *Covent-Garden*, so cheap, that I am inform'd a Pint of it may be purchas'd for Six-pence. It is esteem'd by the Ladies of the Town,

who are too delicate to drink Gin, a very comfortable Cordial, and to give great Relief in Flatulencies and Lowness of Spirits, and to be an excellent Stomachic.

Aqua Epidemia.

Plague Water.

Take of the Roots of Masterwort and Butter Burr, each four Ounces; Virginia Snake Root and Zedoary each two Ounces; the Seeds of Angelica and Bay-berries, each three Ounces; the Leaves of *Scordium*, six Ounces; bruise and cut the Ingredients, and pour thereon two Gallons of French Brandy; and when they have stood to macerate for four Days, draw two Gallons. E.

This is said to be intended as a highly carminative Cordial, in very low and languid Cases, and to raise the Spirits in the Plague and malignant Fevers. But in these Cases I should suspect it of doing great Mischief, for the very same Reason that it gives a temporary Relief.

Aqua Melissæ composita.

Compound Baum Water, commonly called *Eau de Carmes*.

Take of the fresh Leaves of Baum, four Ounces; of the fresh external Rind of Lemons, two Ounces; of Nutmegs and Coriander Seeds, each an Ounce; of Aromatic Cloves, Cinnamon, and the Root of *Bohemian Angelica*, each half an Ounce. Bruise the Leaves, and pound the other Ingredients, and put them in a Glass Cucurbit; then pour upon them a Quart of Brandy; stop the Mouth of the Cucurbit, and leave them to digest two or three Days in a warm Place; then add a Pint of the best simple Baum Water, shake them together; fix a Head to the Cucurbit, and to that a Receiver: Then distill in *Balneo Mariæ*, with a Heat sufficient to make one Drop follow

another, which continue till the Ingredients in the Cucurbit remain almost dry. When the Vessels are cold, take the Water from the Receiver, and preserve it in Bottles well stop'd.

This Carmelite Water, has been long famous in *France*, and is now in most Parts of *Europe*, for its extraordinary cordial Virtues. It is said to be extremely reviving, to be good in all Sort of Fits, Apoplexies not excepted, and to relieve in the Gout when it attacks the Stomach. The *Carmelites at Paris*, who make a considerable Advantage by vending this Water, have endeavour'd to keep the Preparation of it a Secret. But I am pretty well informed, that the foregoing Receipt for it is the genuine Prescription, by which these Religious make it. This is, also, used externally by Way of Embrocation to the Temples, the Region of the Stomach, and other Parts.

Aqua Juniperi composita.

Compound Juniper Water.

Take of Juniper Berries, one Pound; Caraway Seeds, sweet Fennel Seed, of each one Ounce and a half; of Proof Spirit a Gallon; of Water as much as is sufficient to prevent burning. Distill off a Gallon. *L.*

This differs from *Geneva* only by the Addition of the Seeds of Caraway and Fennel, which I don't apprehend communicate to it any additional Virtues. Those which it acquires from the Juniper Berries, may be learned from the Article of *Juniper* in the *Materia Medica*.

Aqua Mentha Piperitidis Spirituosa.

Spirituos Water of Pepper-Mint.

Take of the Leaves of Pepper-Mint dried, a Pound and a half; of Proof Spirit a Gallon; of Water

as much as is sufficient to prevent burning. Distill off a Gallon. *L.*

This Water seems intended to discuss Flatulencies in the Stomach, and to relieve Colic Pains; but I suspect that it acquires no good Qualities from the Brandy.

Aqua Mentha vulgaris spirituos.

Spirituos Spear-Mint-Water.

Take of the Leaves of Spear-Mint dried, a Pound and a half; of Proof Spirit a Gallon; of Water as much as is sufficient to prevent burning. Distil off a Gallon. *L.*

The Virtues of this may be learn'd from those of Mint. But I am afraid the Brandy will do more Injury in most Cases, than the Mint can compensate.

Aqua Mirabilis.

The wonderful Water.

Take of Cinnamon two Ounces; of the external Rind of Lemons one Ounce; of Angelica Seeds, the lesser Cardamoms, and Mace, each half an Ounce; Cubebs, two Drams; and of Balm Leaves, six Ounces; bruise them together, digest them with a Gallon of *French Brandy*, for four Days; and distil off one Gallon. *E.*

This is intended as a warm stomachic Cordial, and is well contrived for that Purpose. But I think it deserves the Consideration of Distillers, much more than that of Physicians, as it can answer no Purpose but what may be provided for by much less pernicious Medicines.

Aqua Nephritica.

Nephritic Water.

Take of the fresh Flowers of white Thorn four Pounds; of Nutmegs bruised three Ounces; infuse them together in a close Vessel with two Gallons of generous white Wine; and

and draw off by Distillation twelve Pounds.

The Flowers of the white Thorn being esteemed very good in the Stone and Gravel, this Water is said to have been much prescribed in such Cases by Dr. Radcliff. I don't believe it is of any great Efficacy; but as Julaps and Draughts must be continued in Practice, I should chuse this for its Insignificancy, preferable to many others which are more pernicious.

Aqua Nucis Moschata.

Nutmeg Water.

Take of Nutmeg two Ounces; of Proof Spirit a Gallon; of Water as much as is sufficient to prevent burning. Distil off a Gallon. L.

The Virtues of this may be known by those of Nutmeg. I must remark, that this Water, if taken in Quantities sufficient to have any Effect, will be very subject to render the Patient costive, which in most Diseases is a very bad Circumstance.

Aqua Pæoniæ composita.

Compound Peiony Water.

Take of the Roots of Peiony, two Ounces; those of wild Valerian, an Ounce and half; white Dittany an Ounce; of Peiony Seeds, six Drams; of the recent Flowers of Lillies of the Valley, four Ounces; of those of Lavender and Rosemary, each two Ounces; of the Tops of Betony, Marjoram, Rue, and Sage, each an Ounce: Slice and bruise the Ingredients, pour upon them a Gallon and half of French Brandy, and after they have macerated four Days, draw off a Gallon and a half. E.

This is greatly recommended as a cordial, cephalic, and nervous Medicine, and is made in Imitation of the *Aqua Epileptica Langii*. But I have been so unfortunate as never to

have seen any Effects from it, which might not have been expected from a Dram.

Aqua Petroselinæ composita.

Compound Parsley Water.

Take of Parsley Root, four Ounces; fresh Horse Radish Root, three Ounces, and Juniper-Berries, six Ounces; the Tops of *St. John's* Wort, biting Arimart and Elder Flowers, of each two Ounces; the Seeds of wild Carrot, sweet Fennel and Parsley, of each an Ounce and half; slice and bruise the Ingredients, and add thereto two Gallons of French Brandy; let them sleep together for four Days, and then draw off two Gallons by Distillation. E.

This is designed for a Diuretic, and Lithontriptic. It may act in the first Intention, but in the second nothing can be expected from it.

Aqua Pulegii spiritiosa.

Spirituous Penny Royal Water.

Take of the Leaves of Penny Royal dried, a Pound and a half; of Proof Spirit a Gallon; of Water as much, as is sufficient to prevent burning. Distil off a Gallon. L.

The Virtues of this may be understood by those of Penny Royal.

Aqua Raphani composita.

Compound Horse Radish Water.

Take recent Horse Radish Root, two Pounds; the fresh Leaves of Garden Scurvy Grass, and those of Water Cresses, each two Pound; the external Rinds of fresh Oranges, and Lemons, each three Ounces; *Canella alba* four Ounces; Nutmeg, one Ounce; cut and bruise these Ingredients; add to them three Gallons of French Brandy, let them macerate together for two Days, and then draw off three Gallons. E.

In the College Dispensatory this is directed to be prepared thus:

Take of the fresh Leaves of Garden Scurvy Grass, four Pounds; fresh Horse Radish Root, the outer yellow Rind of fresh *Seville* Oranges, of each two Pounds; of Nutmeg, nine Ounces; of Proof Spirit, two Gallons; of Water as much, as is sufficient to prevent burning. Distill off two Gallons.

These seem intended as Diuretics, and Antiscorbutics, and are well contrived to answer the End proposed. But the Juices of these Vegetables, mixed with Aromatics, in order to make them sit easy on the Stomach, should seem to promise fairer for a Cure.

Aqua Reginae Hungariae.

Hungary Water.

To two Pounds of Rosemary Flowers, add two Quarts of rectified Spirit of Wine; and just as the Flowers are fresh gathered, let them be immediately distill'd in *Balneo Mariae*. *B.*

I don't know that this Water is of any Use in Medicine, tho' the Perfumers sell a great deal of it, which is used to communicate an agreeable Smell to Linen. But I have never yet seen any made in *England* that was tolerable, if compared with that prepared in *France*. That made in the Manner here directed, gives Linen a disagreeable Scent when dry, instead of a pleasant one, which it acquires from the *French* Hungary Water.

Aqua Sclopetaria, sive Vulneraria.

The vulnerary Water, commonly called *Eau d'Arquebuse*.

Take of the Leaves and Roots of Comfrey, of the Leaves of Sage, of Mugwort, and of Bugle, each four Handfuls; of the Leaves of Betony, Sanicle, Ox-eye, of Daisy, of the greater Figwort, of Plan-

tain, of Agrimony, Vervain, Wormwood, and Fennel, each two Handfuls; of St. John's-wort, of Long Birthwort of Orpine, of Paul's Betony, of the Lesser Centaury, of Yarrow, of Tobacco, of Mouse-ear, of Mint, and of Hyssop, each one Handful: Cut all these, and bruise them sufficiently in a Mortar; then put them into a large earthen Vessel, and pour twenty Pints of white Wine upon them. Stir the Whole with a Stick. Stop the Vessel, and suffer it to digest in a warm Dunghil, or any other such Heat, for the Space of three Days; then pour it over into a large Copper Cucurbit, whose Inside is covered with Tin; and, having adapted its Head and Refrigeratory to it, draw off the Moisture into a Receiver, by a moderate Fire, in the ordinary Manner. Thus you will have the Vulnerary Water, or *Eau d'Arquebuse*, which must be preserved in a close-stopt Bottle.

It is good for Contusions and Dislocations; and is very proper for discussing Tumors; applied externally, it deterges Wounds, and old Ulcers, It incarns, corroborates, resists Putrefaction, stops Gangrenes, and is by some used against Vapours. This Water is extremely celebrated by many foreign Physicians and Surgeons, and occurs frequently in their Writings and Prescriptions. It may possibly be a very good Water for external Uses, for which it is principally intended.

Aqua Seminum Anisi composita.

Compound Aniseed Water.

Take Aniseeds, and Angelica Seeds, of each half a Pound; of Proof Spirit a Gallon; of Water as much as is sufficient to prevent burning. Distill off a Gallon. *L.* The Virtues of this may be understood by those of Aniseeds.

Aqua

Aqua Seminum Cardamomi.

Water of Cardamom Seeds.

Take of the lesser Cardamom Seeds husked four Ounces; of Proof Spirit a Gallon; of Water as much as is sufficient to prevent burning. Distill off a Gallon. *L.*

The Virtues of this may also be learned from those of Cardamoms, in the *Materia Medica*.

Aqua Seminum Carui.

Water of Carraway Seeds.

Take of Carraway Seeds, half a Pound; of Proof Spirit a Gallon; of Water, as much as is sufficient to prevent burning. Distill off a Gallon.

See the Article *Carum*, under Vegetables, for the Virtues of this Water.

Aqua Theriacalis.

Treacle Water.

Take of the Roots of Butter-bur, a Pound; those of Angelica and Master-wort, each half a Pound; of Zedoary, four Ounces; of the Leaves of Rue and *Scordium*, each six Ounces; *Venice* Treacle, a Pound; *French* Brandy, three Gallons: digest all together for four Days, and afterwards distill off two Gallons and half of Water; to which add two Quarts of distilled Vinegar. *E.*

This is intended as a Sudorific and Alexipharmic, and may do Good where such Sorts of Medicines can be serviceable, which very seldom happens. But as I have a very bad Opinion of the Composition from whence it takes its Name, I should have a worse of this Water, if it was not for the Vinegar, which may possibly prevent it from doing much Mischief.

As the Water distill'd from Hartshorn is taken no Notice of by the

Compilers of our Dispensatories, but is a Medicine much used by the *French* Physicians, we shall here give the various Methods of preparing it, directed in some of the most celebrated Dispensatories. In the *Brandenburgh Dispensatory*, therefore, and the *Pharmacopœia Parisensis*, it is prepar'd by Distillation from the young and tender Horns of the Stag. According to *Ettmuller*, "it is an excellent Medicine against Palpitations of the Heart; and a good Vehicle for exhibiting to Children, Infants, and Adults, Alexipharmic Medicines in Fevers, and other Disorders of a malignant Nature. It is he says proper for promoting the Eruption of the small Pox and Measles; as also for curing Epilepsies either by itself, or mix'd with other proper Medicines. This Water is used with Success by Child bed Women, when seiz'd with the purple Fever; as also in immoderate Fluxes of the Lochia, Dysenteries, and Scurvy." Others also recommend it for promoting the Expulsion of the Fœtus. But it is in reality possess'd of scarce any other Virtues than those of common Water; for these young and tender Horns, as also all other Parts of other Animals, as *Zwelfer* justly observes, only send forth in such Distillation an elementary Water or Moisture possess'd of very inconsiderable Virtues; and which, tho' impregnated with an empyreumatic Smell, cannot from that Circumstance, be thought to possess so very powerful Qualities. The *Aqua Cornu Cervi è tenellis cum Vino*, in the *Brandenburgh Dispensatory*, receives besides the tender Horns, stimulating and alexipharmic Medicines, entire Citrons, Astringents, and other Substances, which in Distillation, do not yield their Virtues: all these are distill'd with Wine, and Water of

Germander. It is said to be alexipharmic and Cordial, which Qualities it more justly claims than the preceeding Water, not on Account of the Hartshorn, but of the aromatic, spirituous, and heating Ingredients. *Schulzins* passes his Judgment upon them both in the following Words: "They are supported upon a groundless and implicit Opinion, the worst of Foundations. Some fond Abettors of Antiquity, however, ascribe a great deal to Compositions of this kind. As there is no Necessity for envying these Men their *Nostrums*, they may be at Liberty to enlarge at Pleasure the Class of Cordials and Alexipharmics. Of the simple Water, a few Ounces may be exhibited for a Dose; and of that prepared with Wine, one is sufficient." Both these Waters are now in Disuse, because better and more judicious, or at least as good, Compositions are to be had with more Ease. They may, indeed, be us'd as Vehicles for other Medicines, that the Apothecary may have no Reason to complain of sustaining a Loss on Account of their

being discarded. The *Aqua Typhorum Cervi*, in the *Pharmacopœia Argentoratensis*, is distill'd with Wine alone. This Preparation is by some commended, as an Alexipharmic, and good against Burning and Malignant Fevers. A few Spoonfuls may be given for a Dose. What rises in the Alembic seems to be simple Spirit of Wine, as may be also known from its Virtues and Properties. The *Aqua Cornu Cervi Citrata Waldschmidii*, in the *Pharmacopœia Argentoratensis*, is prepared of the Shavings of Hartshorn, distill'd with entire Citrons, and some distill'd Waters of Vegetables, commonly call'd alexipharmic or stimulating, with an Addition of the Water of Sorrel. This Preparation is accounted analeptic, and proper for allaying preternatural Heats. It is also said to be alexipharmic. A Spoonful of it may be exhibited at a Time; or it may be mix'd with other proper Liquors. From what is before said, 'tis obvious, that whatever Virtues these Waters possess are owing to the Ingredients used in Distillation, and not to the Hartshorn. All these are therefore, justly disregarded in our Pharmacy.

CH A P. IV.

SPIRITS by DISTILLATION.

Spiritus Vini Rectificatus.

Rectified Spirit of Wine.

TAKE any Quantity of French Spirit of Wine, or Brandy; drawn off by Distillation, one half, by a very gentle Heat.

This Spirit digested for two Days, with a fourth Part of very dry Salt of Tartar in Powder, and then distilled from a Glass Cucurbit, with an extreme gentle Heat, is *Alcohol*. E.

Spiritus Cochleariæ.

Spirit of Scurvy Grass.

Take of fresh Scurvy-grass bruised, ten Pounds; and rectified Spirit of Wine, five Pints; let them macerate together for twelve Hours; and then draw off five Pints of the Liquor, in *Balneo Mariæ*. E.

This is intended as an Antiscorbutic, and is given in any convenient Vehicle, from twenty to one hundred Drops, or more. It is vulgarly called plain or white Spirit of a Com-

Scurvy-grafs, to distinguish it from a Compound, red Sort, commonly sold by the Name of Golden, or Purging Spirit of Scurvy-grafs; which is made by dissolving an Ounce of Rosin of Jalap, Scammony, or Gamboge in the former. The Dose of the latter is said to be from twenty to sixty Drops, but is never us'd that I know of in regular Practice.

Spiritus Lavendulæ simplex.

Simple Spirit of Lavender.

Take of fresh Lavender Flowers, a Pound and a Half; of Proof Spirit a Gallon. Distill off five Pints, in a Bath Heat. L.

Spiritus Lavendulæ Compositus:

Compound Spirit of Lavender, or Palsy Drops.

As this celebrated Medicine is esteem'd of some Importance in Physic, I shall in this Place give the various Methods of preparing it, from all our Dispensatories.

Take Flowers of Lavender, one Gallon; pour upon them four Gallons of French Brandy, and add fresh Flowers of Sage, Rosemary, and Betony, of each one Handful; of Borage, Bugloss, Lillies of the Valley, and Cowslips, of each two Handfuls; of the Leaves of Baum, Feverfew, and of the Orange Tree fresh gather'd; of the Flowers of Stœchas, Oranges, and Bay Berries, of each an Ounce; digest these together, and draw off in *Balneo Mariæ*, two Gallons and a Half; then add of the outer Rind of Citrons, and of yellow Sanders, of each six Drams; of Cinnamon, Nutmegs, and Mace; of the lesser Cardamom Seeds, and Cubebs, of each Half an Ounce; of Aloes Wood, one Dram; digest these for twenty-four Hours, and filtre the Spirit; then if it be

thought proper, add of Musk, Ambergrise, and Saffron, of each Half a Scruple; red Roses dried, and red Sanders, of each Half an Ounce; let the Species be tied up in a thin Bag, and suspended in the Spirit.

In some of the first Editions of the *Edinburgh Dispensatory*, compound Spirit of Lavender, was order'd to be thus prepar'd,

Take of the Flowers of Lavender, one Pound; those of Lilly of the Valley, fresh gathered, those of *Arabian Stœchas*, and those of Rosemary, each two Ounces; the Tops of Betony, Marjoram, Balm and Sage, each an Ounce and Half; Cinnamon, two Ounces; the yellow Part of the fresh Citron or Lemon Peel, an Ounce; Bay Berries, the lesser Cardamoms and Nutmeg, each six Drams; Cloves, Cubebs and Mace, each Half an Ounce: Bruise them all together, and pour thereon two Gallons of French Brandy, digest for four Days; then in *Balneo Mariæ* draw off the Spirit as long as it will run, wherein suspend the following Ingredients, contain'd in a Piece of fine Linen; *viz.* red Sanders in Powder, Half an Ounce; Cochineal, and Saffron, of each two Drams: and if the Spirit be desired perfumed, one Scruple of Ambergrise, and ten Grains of Musk.

In the last Edition of the *Edinburgh Dispensatory* it is order'd thus,

Take of French Brandy, three Gallons; instil into it gradually, sometimes shaking it of the distill'd Oil of Lavender, an Ounce and a Half; Oil of Rosemary, an Ounce; Oil of Marjoram, six Drams; Oil of Lemon Peel, Half an Ounce; Oil of Nutmegs, three Drams; Oil of Cloves, two Drams; and Oil of Cinnamon

Cinnamon, one Dram; let Half of this Spirit, thus saturated with the Oils, be distill'd in a Bath Heat to two Thirds: Suspend in the distill'd Spirit, of red Sanders powder'd, one Ounce; Cochineal, and *English* Saffron, each two Drams, included in a fine Linnen Rag, and if it is required to be perfum'd, suspend in the same Rag, a Scruple of Ambergrise, and Half a Scruple of Musk.

The last *London* Dispensory, orders it thus,

Take of the *Spiritus Lavendulae simplex*, three Pints; of Spirit of Rosemary, one Pint; Cinnamon, Nutmeg, of each Half an Ounce; of red Sanders, three Drams. Digest them together, and then strain off the Spirit.

As I have seldom known any us'd, besides that first prescrib'd, I cannot determine from Experience, which is the most effectual, but they all seem to be admirable Medicines, as reviving Cordials, Balsamics, and Cephalics, and infinitely preferable to any of the Compound Waters, in most of the Intentions, where the latter can be of any Use. *Quincy* informs us, that Spirit of Lavender has long been celebrated in all nervous Cases, and is now greatly used in the Shops. In the Decays of Age, and convulsive, and apoplectic Shocks, such as bring on Palsies and Loss of Memory, this is of very good Service, and has been so much remark'd for such Efficacies, as almost universally to obtain the Name of *Palsy-Drops*; it may be taken from twenty, to one hundred Drops at a Time; the best way is upon Sugar, and letting it gradually dissolve in the Mouth, because by that Means it soaks more immediately into the Nerves, and gives a more sudden Supply to the Spirits, than

when it is diluted by any Vehicle, and carried with it into the Stomach.

Spiritus Matricalis.

Antihysteric Spirit.

Take of yellow Amber, two Ounces; Myrrh, one Ounce and a Half, of *Russia* Castor, one Ounce; pulverize them fine, and add as much Oil of Tartar *per Deliquium* as will make it into a soft Paste, to which afterwards add, when gently dried, half an Ounce of *English* Saffron, and two Quarts of rectified Spirit of Wine: Digest for four Days and draw off three Pints of Spirit in a glass Retort. E

This Composition, or something very like it, is in many foreign Dispensatories, and is much us'd by Physicians abroad, as an Uterine, and Antihysteric.

Spiritus Bezoarticus Bussii.

Bezoartic Spirit of Bussius.

Take Spirit of Ivory, saturated with a subtle Oil and volatile Salt about two Ounces, Sal Ammoniac four Ounces; Pot-ash first dissolved in Water, eleven Ounces, Amber finely pulverised, half a Pound, genuine Oil of Cedar, or of Juniper, half an Ounce, rectified Spirit of Wine a Pint and half. All these Ingredients being exquisitely mixed, in a glass Cucurbit, are to be distilled in a sand Heat, by which we extract a Spirit endued with considerable Virtues. A volatile Salt first rises in the Alembic, which is afterwards successively dissolved by the Spirit.

It is here to be observed, that *Peruvian* Balsam, or the fresh Peel of Lemons, or Oranges, or Juniper berries, or any other balsamic and aromatic Powders may be used instead of the Ingredients before mentioned. In the Process a limpid Spirit,

rit, like Water, comes over, but the longer it is kept in a Vessel exposed to the Air, the more yellow it turns, till its Colour be heightened almost to a Redness. If a Glass be filled with this Spirit and cover'd with a Stopple, it will continue clear, and suffer no Alteration of Colour.

This Spirit abounds with an oily volatile Salt, for the more a volatile Salt is impregnated, and intimately mixed with an Oil, the more easily and readily it unites, with highly rectified Spirit of Wine, and that Salt may immediately be precipitated from this Spirit, by mixing a few Drops of Oil of Vitriol with it, which produce a Coagulation and Precipitation of the Salt to the Bottom, where it firmly adheres to the Sides of the Glass. It is worthy our Observation, that this volatile Spirit of *Bussius* is endued with an almost incredible Virtue in subverting and expelling all Kinds of Acids, tho' never so strong, and these Effects are attended with different Circumstances and Events. Thus if one Part of the Spirit of Nitre or Aqua-fortis, be poured to three Parts of this Spirit, all the Acidity is soon taken off, without any remarkable Ebullition, and nothing is precipitated to the Bottom, the Mixture acquires a mild nitrous Taste, and being put into a Silver Spoon, and evaporated by the Heat of a Candle, leaves a Salt of an exquisitely nitrous Flavour. This Mixture also, on Account of the volatile Nitre which it contains, is endued with excellent medicinal Virtues; for in acute Distempers, where volatile Medicines are of no Effect, because of the violent Motion and Effervescence of the Blood, this Spirit, mixed with Spirit of Nitre, and render'd more temperate, gives all the Relief that can be wished, by gently carrying off the morbid Matter.

If this Spirit of *Bussius*, be mixed with

Spirit of Salt strongly concentrated there arises a greater Ebullition than in the former Case, but all the Acid is, in like Manner, in a very short Time subdued, and the Liquor turns Salt, which in Disorders of the Stomach, where the Appetite is lost, may be given with Success, for dissolving viscid Crudities. When this Spirit is mixed with distilled Oil of Vitriol, there immediately arises an Effervescence, the Mixture becomes turbid, and all the volatile Salt is precipitated to the Bottom, the Taste of the Mixture has nothing of Acidity, but has a grateful Smell. The Reason why there is a Concretion and Precipitation of the volatile Salt, at the Mixture of concentrated Oil of Vitriol, but not with other Acids, seems to be as follows. Oil of Vitriol, as being a very strong Acid, unites with inflammable Spirit of Wine, which is an oily Substance; hence the volatile Salt which it contains, is precipitated; but from other acid Spirits, which are weaker, and incapable of so intimate a Combination with the inflammable Spirit of Wine, there follows no Precipitation. From these Experiments we may draw this Conclusion, which is very useful in Practice: That this Spirit which abounds with an oily volatile Salt, may be given in large Doses, without Inconvenience, in Distempers, especially chronical ones, where a strong and copious Acid is lodged in the Sinuses of the Stomach and Intestines, and creates Disturbance in those Parts, as it does more remarkably in hypochondriacal Affections.

This Spirit takes its Name from its Inventor, *Bussius*, an eminent Physician of *Dresden*, and the Medicine itself is of universal Use in *Saxony*, and well deserves our Notice, for it is a powerful Sudorific and Diuretic, with due Management, and is an excellent Anti-spasmodic. Besides, it recommends itself, on Account of its grateful

grateful Flavour, having nothing of a nauseous empyreumatic Smell. The Foundation of the Preparation consists in mixing the volatile, urinous, and oily Spirits of Animals with highly rectified Spirit of Wine, and with an Addition of balsamic Species, distilling them over a proper Fire, by which Means we obtain a Spirit well impregnated with volatile Salt, an empyreumatic Oil, and refinous, sulphureous, balsamic Particles, and of no unpleasant Smell and Taste.

This Medicine is described by *Frederic Hoffman*, and introduced with the preceding Character. It somewhat resembles our *Spirit of Sal Volatile*, and promises fair to be an elegant, effectual, and agreeable Medicine. *Quincy's* Directions for preparing the Spirit of *Sal Volatile*, or, as it is usually called, *Sal Volatile*, are thus,

Sal Volatile Oleosum.

Take of *Sal Ammoniac*, and Salt of Tartar, of each half a Pound, powder them apart, and mix them; put the Mixture into a Retort; put also into the Retort, the Leaves of *Marum Syriacum* half an Ounce, and of tartarized Spirit of Wine, one Pound and an half, impregnated with the essential Oils of Cloves half an Ounce; Cinnamon, one Scruple; Nutmeg, two Scruples, of Marjoram, Lemons, and Oranges, of each one Ounce; put to them of clean Water, two Pounds; and set all in a Sand Furnace, lute on a Receiver; and give Fire of the first Degree for one Hour and a half, increase to the second; which continue, five or six Hours, or until the white Salt which first shot at the Top of the Receiver, begins to melt down; Then put out the Fire, and pour the Spirit, which will have a great

deal of loose Salt in it, into a Vail by itself for Use; and the Salt hardened upon the upper Part of the Receiver into another.

This Preparation, is greatly now in Use; and for its preferable Fragrancy has almost excluded the Use of Spirit of Hartshorn, and the plain Spirit of *Sal Ammoniac*. It is a most noble Cephalic and Cordial, either to smell to, or take inwardly. Its Dose is from ten Drops, to one hundred or upwards, in Wine, or any common Vehicle. It is much varied according to the different Humours of the Maker; so that there would be no End of giving all the Receipts followed. This is one of the best, and whosoever pleases, may omit any of these Aromatics, or put others in their Room, if it may better suit any particular Intention. A *Sal Volatile* thus made with *Marum Syriacum* alone, is wonderfully penetrating, grateful and serviceable to the Head; and diluted to a convenient Strength, is one of the best Sternutatories that can be invented. It is easy to impregnate this with Steel. The slower the Fire is, the more Salt crusts upon the Top and Neck of the Receiver; and therefore if Care be taken not to draw it too near, whereby that Salt is melted down, a great deal may be preserved, which is vastly preferable to all of this Kind; not only for Fragrancy of Scent in Smelling Bottles, but for Efficacy internally used in all Nervous Cases.

Spiritus Salinus Aromaticus.

The Saline Aromatic Spirit.

In making the Compound Spirit of Lavender, according to the *Edinburgh Dispensatory*, only one half of the Spirit is directed to be used. Take, therefore, the remaining half of that Spirit impregnated with the essential Oils, and add to it of volatile *Sal Ammoniac* eight Ounces. Distill off imme-

Immediately in a Sand Heat, two thirds.

This seems to be intended by the Compilers of the *Edinburgh Dispensatory*, for the same Uses as the preceding.

Spiritus Volatilis Aromaticus.

Aromatic Volatile Spirit.

Take Essence of Lemons, essential Oil of Nutmegs, of each two Drams; of essential Oil of Cloves half a Dram; of dulcified Spirit of *Sal Ammoniac* a Quart. Distil with a very gentle Fire. L.

This seems intended for the same Uses as the preceding. I don't comprehend why the Compilers of the *Edinburgh*, and *London Dispensatories* have thought proper to change the Names of these and some other Medicines; because it causes Confusion and Perplexity, without any one Advantage to compensate it; and therefore Terms universally received in the Art, should be adher'd to, unless there is some very good Reason for the Alteration.

Boerhaave has given us a Process, for making an extemporaneous *Sal Volatile Oleosum*, thus,

Take one Part of Salt of Tartar, three Parts of *Sal Ammoniac*, twelve Parts of Aromatics, reduced to Powder, and twenty six Parts of rectified Spirit of Wine; mix them together, by long shaking in a Bolt Head. The alkaline Salt will thus immediately unite with the Alcohol that floats above, the Water being attracted into the Salts; at the same Time the Salts and Spirits will attract the Oil out of the Spices, and thus the Liquor that floats above, will presently become the *Sal Volatile* required; as the famous *Le Mort* has observed.

These are the Methods generally directed for making the *Sal Volatile*

Oleosum, which are all a Kind of volatile Soap, form'd by the Union of Alcohol of Wine, with the Spirit of *Sal Ammoniac*, and impregnated with the presiding Spirit of Vegetables. Medicines may be prepared in this Manner, to answer almost any Intention whatever; for when we are certain of the Virtues of any Vegetable, and that these Virtues reside in the Oil, we may by the Methods above described prepare a volatile oily Salt, impregnated with the particular Virtues of the Plant. Thus if a Cephalic is wanted we may use Lavender, Rosemary, or Marjoram; if a Cardiac, the Peel of Orange, Lemon, Citron, Cinnamon, or Nutmeg; if an Emmenagogue, Juniper, Rue, Savine, or *Arbor Vitæ*, or the distil'd Oils of either, or any of them.

Basil Valentine is said to be the first Contriver of this Kind of Medicine; but its general Use was introduced by *Sylvius De la Boe*. But as is usual in such Cases, the Followers of these Physicians, used it too universally, and without Distinction. *Boerhaave* says, that volatile oily Salts thus prepared, by their Odour, Taste, Penetrability, Mobility, saponaceous Virtue, and the Power they have of correcting what is acid and austere, afford a Remedy of singular Efficacy, in the Hands of a prudent Physician. For they are excellent in all watery, mucous, cold, acid, austere Distempers, where the Efficacy of the Bile is wanting, and in all sluggish Disorders unattended with Inflammation or Putrefaction, especially when the Disorders, or unequal Motions of the Nerves and Spirits, occasion troublesome hypochondriacal and hysterical Fits, with the Flatulencies thence proceeding. Hence it is at present accounted a noble Restorative, stomachic, warming, sudorific, diuretic, diaphoretic, antispasmodic, and anti-epileptic Medicine, where the Distemper proceeds from

from the Causes above mentioned. But in inflammatory Distempers, where the Juices are dissolved and putrid, in the alkaline Scurvy, the Phthisic, Consumptions, and other Cases, where the Body is almost dissolved down, they often prove highly pernicious, and sometimes destructive. Physicians, therefore, are to be seriously admonished against permitting Men, and particularly Women of a weak Constitution, the frequent Use of these Salts.

Spiritus Volatilis fœtidus.

Fetid Volatile Spirit.

Take of any fix'd alkaline Salt, a Pound and a half; of Sal Ammoniac, a Pound; of Assa fœtida, four Ounces; of Proof Spirit, three Quarts; distill off, with a gentle Heat five Pints. *L.*

The medicinal Virtues of this may be understood from those of *Assa Fœtida*. It promises fair to be a good Antihysteric, and nervous Medicine, and to be capable of affording Relief in spasmodic Disorders.

Spiritus Mindereri.

Mindererus's Spirit.

Take any Quantity of distill'd Vinegar, and add to it by Degrees, as much of the Spirit of Sal Ammoniac as will put a Stop to the Effervescence. *E.*

When the Vinegar is saturated with the Spirit of Sal Ammoniac, and the Mixture is perfectly neutraliz'd, it makes a Medicine of Virtues very different from those of either the Vinegar, or Spirit of Sal Ammoniac. It is extremely resolvent and penetrating, and is often given in Fevers and febrile Disorders, in the Quantity of half an Ounce, made into a Draught with some simple Water and Syrup, and repeated frequently. And in such Cases it is much more likely to do Service, than the common

Draughts composed of simple and compound Waters, and Syrups. It may be made by saturating distilled Vinegar with Volatile Sal Ammoniac. I don't know why the Compilers of the *Edinburgh Dispensatory* have thought proper to make this a Shop Medicine, for it is prepared very readily extemporaneously, and is not worse for being recently made. The common Draughts made by mixing the Juice of Lemons, with Salt of Wormwood, to the Point of Saturation, is intended for the same Uses as this *Spiritus Mendereri*, but I think the latter much preferable, provided the Vinegar made use of is the true *French Vinegar*, and not that four Beer, which is generally amongst us substituted in its Room. In extemporaneous Prescription, where an Alkali and an Acid are united, with an Intent to form a neutral Mixture, it is impossible to specify exactly the Quantity of Alkali sufficient to saturate the Acid, because the one or the other, may happen to be stronger or weaker. It is therefore best to direct the Alkali to be added till the Point of Saturation is obtained, of which the Compounder only can be a Judge.

As the Virtues of neutral Salts in Medicine are not commonly understood, tho' often exhibited as it were accidentally, and without any Design, I shall in this Place endeavour to explain their Uses in the Words of a very celebrated Physician. Among all the various Salts in Nature, none are more safe and efficacious, than neutral Salts, which are: also, possessed of a cathartic Quality. Neutral Salts are those compounded of an alkaline Salt, or Earth, and an acid Salt, in such a Manner as that the one does not predominate over the other: Now as alkaline and acid Salts, when separate, are of so strong a Taste and Quality, as often to approach to a corrosive Nature, so

when

when mixed in a due Proportion with each other, they are, by the mutual Allision and Conflict of their Parts, so corrected, as not only with Respect to Taste, but also all their other Qualities, to become a Salt of a middle Nature, highly innocent in itself, and friendly to the human Constitution. Perfectly neutral Salts, therefore, are such as produce no Degree of Effervescence; but are perfectly saturated, upon the Affusion of any acid or alkaline Liquor.

Neutral Salts are of great Efficacy in the Cure of Diseases, possessed of an aperient and detergent Quality, capable of promoting all the Excretions, and, when exhibited in large Doses, of a cathartic Quality. 'Tis, also, sufficiently obvious, that Salts of this Kind are, of all others, the most salutary, and so friendly to Nature, that the Physician can neither practice successfully without them, nor easily produce any bad Effects by using them. But many Objections may be made to this Doctrine, since both Experience, and accurate Observation convince us, that those Medicines which are highly acid, as, also, volatile, urinous, and fixed alkaline Remedies, are so far from being unsalutary and unfriendly to the Constitution, that they may be said to be the most safe of any. But to this I answer, that neither acid nor alkaline Medicines, whether of the fixed or volatile Kind, ever produce a salutary Effect, unless by the internal Disposition of the Humours, especially those lodged in the *Primæ Viæ*, they are converted into a neutral Salt, and by that Means rendered friendly to the solid as well as fluid Parts of the human Body.

For this Reason, when a large Quantity of Bile, especially of an alkaline and oleous Kind, is collected and becomes stagnant, in the Flexure of the Duodenum, strongly affects the nervous System, and by

that Means often produces bilious Vomitings, Nausea, Loss of Appetite, hectic Heats, Cephalalgias, and an insatiable Thirst, then acidulated Liquors, such as Julaps, Refrigerants, or other acid mineral Spirits edulcorated, are of singular Service. Besides, when an intense febrile Heat, arising from a violent intestine Motion of the sulphureous Parts of the Blood, by destroying its temperate and due Texture, exhausts the Body, and impairs the Strength, Acids are in such Cases more beneficial than neutral Salts, alkaline Substances, or any other Remedies, because they are capable of fixing and subduing the sulphureous Particles, by whose Motion the Heat is produced. In malignant Disorders arising from a Putrefaction of the Humours, more Relief is to be expected from Acids than from any other Remedies, because a Putrefaction not only generates an Alkali, but also proceeds from a large Quantity of it: And when this Alkali is corrected and subdued by an Acid, the Putrefaction is forthwith stopt. In inveterate Scurvies, and Arthritic Disorders, large Quantities of Salts are generated in the Mass of Blood, which approach more nearly to an alkaline and lixivious, than to a neutral Nature. Hence the Blood of such Persons, when taken from the Veins, appears thin and florid, and their Urine is, for the most part, highly red, saline, and lixivious. And Experience teaches us, that in such Cases, more happy Effects are often produc'd by temperate Acids, than by alkaline, urinous, and volatile Medicines, or those of an hot and spirituous Nature.

Those Medicines which abound with an alkaline Salt, whether of the fix'd or volatile Kind, are by no Means to be promiscuously and indiscriminately used, tho' they are of singular Service, when prudently exhi-

exhibited; for when a Redundance of acid Humours is lodged in the *Primæ Viæ*, and excites violent Symptoms, as we observe in hypochondriac, hyfteric, and melancholic Patients, such as Corrosions of the Stomach and Intestines; Anxieties, Inflammations of the Stomach, attended with a *Cardialgia*, Coughs accompanied with Pains of the Stomach, Cephalalgias, excessive Costiveness, or preternatural Looseness, accompanied with a Tenefmus, in these Cases, certainly, earthy Alkalines, and especially Crab's Eyes, prepared Shells, or Oil of Tartar *per Deliquium*, will produce more happy Effects, than any other Medicines, because by absorbing the Acid they convert it into a neutral Salt, which is afterwards easily carried through the excretory

Ducts, without exciting any violent Symptom. But if there is rather a Defect than a Redundance of the Acid in the *Primæ Viæ*, and if these are full of viscid and tenacious Humours, alkaline earthy Substances, taken in large Quantities, are highly prejudicial; for since they are not dissolved, they rather, by uniting with the earthy and slimy Particles, augment the Quantity of the Phlegm, and by that means destroy the Appetite, load the Stomach, obstruct the Mouths of the lacteal Vessels, and render the Patient costive. Thus we see, that the true Uses of alkaline and acid Medicines are, to neutralize the Juices, which then not only become perfectly innocent and inoffensive, but farther form excellent Medicines within the Body.

C H A P. V.

WATERS by INFUSION and VINEGAR.

Aqua Aluminosa.

Alum Water.

TAKE of corrosive Mercury sublimate, and Roch Alum, each two Drams; powder them in a Glas Mortar, and boil them in two Pints of Spring Water; to the Consumption of half: Let it subside and pour off the clear Liquor. E.

This is only intended for external Uses, and even for these requires much Dilution, that is, with twice, thrice, or even four times its Quantity of Water. It is said to be useful in obstinate Eruptions, and foul chro- nical Ulcers.

Aqua Aluminosa Bateana.

Bate's Alum Water.

Take Alum, white Vitriol, each half an Ounce; of Water a Quart. Dissolve the Salts by boiling them in Water, and when the Fæces have subsided, filtre the Liquor thro' Paper. L.

Aqua Calcis seu Benedicta.

Lime Water.

Take a Pound of Quick Lime, and a Gallon of hot Spring Water; stir them well together; afterwards suffer the Lime to subside, and pour off the clear, which is to be kept in Vessels carefully stop'd. It

is made in the same Manner as calcin'd Oyster Shells. E.

The *London Dispensatory* orders a Gallon and a half of Water, to a Pound of Quick Lime. This is recommended as an extraordinary Medicine in many Cases of Obstinacy; and if three or four Ounces of it be drank three or four times a Day, is said to cure red pimpl'd Faces, Strumas, Dysenteries, the *Fluor Albus*, Rheumatic Pains, and the Diabetes. It is certainly a powerful Dryer; and very proper to use in Decoctions of the Woods, and all Ingredients of that Intention: But tho' the making of it is easy enough, yet here in *London* it may be had at any Time, as *Quincy* informs us, from the Sugar Bakers, by the Name of Lime Water, as it happens to be wanted; because they use it much in refining their Sugars. This is also much praised for cleansing and drying up old foul Ulcers, both by its internal Use; and washing them frequently with it.

Boerhaave remarks, that Lime when assisted by Heat, and the vital Motion, presently generates those fiery Spirits, that prove destructive to the tender pappy Mass of the Brain and Nerves; and the hotter, or more agitated the Body, or the more it is affected with inflammatory Disorders, the more destructive the Use hereof is. But when the Body abounds with acid Water or Phlegm; the prudent Application thereof may be sometimes of Service. We must also consider that the Lixivium of Quick Lime has a great Force in correcting, and extricating the muriatic fixed Salts in the Blood; and fitting them to be easily discharged; whence it becomes an extraordinary Remedy in that Kind of Scurvy, which principally proceeds from the above mentioned Causes: But in that Kind of Scurvy, which proceeds

from Putrefaction, and consists in a sharp Oil and Salt, it proves highly prejudicial. Whence, perhaps, we may in some Measure reconcile the Experiments of some eminent Physicians in *France*, which shew the Lixivium of Quick Lime to be pernicious in that Country; whereas in *Germany* it appears a very advantageous Medicine. But all this holds more true of the Quick Lime prepared from Stone, than of that from Shells.

Aqua calcis minus composita.

The lesser compound Lime Water:

Take of Liquorice one Pound, of Sassafras Bark half an Ounce, of simple Lime Water three Quarts: Infuse two Days without Heat, and then strain off the Liquor. L.

Aqua calcis magis composita.

The more compound Lime Water:

Take of the Rasplings of Lignum Vitæ half a Pound; of Liquorice one Ounce, of Sassafras Bark half an Ounce, of Coriander Seed three Drams, of simple Lime Water three Quarts. Infuse as before, and then strain off. L.

The Virtues of these may be understood by comparing those of the Ingredients, with those of Lime-Water.

Aqua Ophthalmica.

Eye Water.

Take of unprepared Bole Armoniac, two Ounces; unprepared Turky, an Ounce; and of white Vitriol, half an Ounce; of Camphire two Drams; reduce them to Powder, and pour thereon two Quarts of hot Spring Water; boil them together, and stir the Mixture frequently; and after due Time allow'd for it to settle, pour off the clear. E.

This is only intended for external

Ules; it is said to be good against Inflammations, and particularly to check Rheums in the Eyes; and if too sharp it may be lower'd by the Addition of Water. *Quincy* recommends a Water much like this, which he calls *Aqua Camphorata*, for cleansing Ulcers, by washing them frequently with it warm, and he says it keeps the Gums clean, and firm to the Teeth, if they are frequently rubb'd with it. He farther recommends it as a safe and efficacious Topic in the Itch, if the Eruptions, and Parts affected are frequently washed with it; with much the same Intentions, the *London Dispensatory* directs a Water under the Title of,

Aqua Vitriolica Camphorata.

Camphorated Vitriolic Water.

Take of white Vitriol half an Ounce; of Camphire two Drams; of boiling Water a Quart. Mix them, that the Vitriol may be dissolved; and after the Fæces have subsided, filtre the Water thro' Paper. *L.*

Aqua Ophthalmica altera.

Another Eye Water.

Take white Vitriol, and Bay Salt, of each one Ounce; decrepitate them together, till the Detonation is over, than pour upon them in an earthen Pan, one Pound of boiling Water; stir them together, and let them stand some Hours: A various colour'd Skin will fix upon the Surface; which carefully take off, and put the rest in a Phial for Use.

Quincy says, this was communicated to him as a wonderful Secret; and indeed says he, I have found it, by Abundance of Trials, very safely to cool and repel those sharp Rheums, which sometimes fall upon the Eyes; and to clear them of beginning Films and Specks. If it be too sharp, it may be diluted with a little Spring, or Rose Water. *Q.*

Aqua Phagedænica.

Phagedenic Water.

Take a Pint of Lime Water, and half a Dram of corrosive Mercury sublimate, and make a Solution thereof. *E.*

This is intended for external Application only, and even thus must be used with great Caution, and much Dilution, either with Water, or Spirit of Wine, and thus it is said to be a good Lotion for old eating Ulcers.

Aqua Sapphirina.

Sapphire coloured Water.

Take a Pint of fresh Lime Water, and two Drams of *Sal Armoniac*; make a Solution thereof, and put it into a Copper Vessel till it has from thence acquired a blue Colour. *E.*

The *London Dispensatory* orders but one Dram of *Sal Armoniac*.

This Water is in much Use for taking away Specks, or Films, or curing Ulcers in the Eye, for which Purpose two or three Drops are to be put into it. The Lime Water is drying; the *Sal Armoniac* is extremely resolvent; and the Tincture it acquires from the Copper, renders it very mildly corrosive.

Aqua Styptica.

Styptic Water.

Take of blue Vitriol and Roche Alum, each half a Pound; Spring Water, two Quarts; boil them together till the Salts are dissolved, and afterwards filtre the Liquor; to each Pint whereof add a Dram of Oil of Vitriol. *E.*

The Title of this Water explains its Uses. The *London Dispensatory* directs a Water with much the same Intention, under the Title of

Aqua

Aqua Vitriolica cærulea.

The blue Vitriolic Water.

Take of blue Vitriol three Ounces; Alum, the strong Spirit or Oil of Vitriol, of each two Ounces; of Water a Pint and a half. Boil the Salts in the Water, till they are dissolved; then add the Oil of Vitriol, and strain the Mixture thro' Paper. L.

Tar Water.

Pour a Gallon of cold Water on a Quart of Tar, and stir and mix them thoroughly with a Ladle, or flat Stick for the Space of three or four Minutes, after which the Vessel must stand eight and forty Hours, that the Tar may have Time to subside, when the clear Water is to be poured off, and kept covered for Use, no more being made from the same Tar, which may still serve for common Purposes.

This is the Method of making Tar Water, as directed by the Bishop of Cloyne, and as it is now in almost universal Use, I thought it not amiss to take Notice of it in this Place. Its Uses may be learn'd from what I have heretofore said upon the Subject of Balsamics.

Lotio Saponacea.

The saponaceous Lotion.

Take of Damask Rose Water three quarters of a Pint; of Olive Oil, a quarter of a Pint; of the Ley of Tartar the Measure of half an Ounce. Rub the Ley of Tartar and Oil together, till they are mixed; then gradually add the Water. L.

This seems intended as a Detergent and Resolvent, but I can see no End it answers, which may not be provided for by extemporaneous Prescription. For a Solution of some of the finer Soaps in Water will

answer all good Purposes as well, and may be render'd more deterfive if requisite, by the Addition of a Solution of Salt of Tartar, or any other alkaline Salt.

Acetum distillatum seu Spiritus Aceti.

Distill'd Vinegar, or Spirit of Vinegar.

Take any Quantity of the best Vinegar, put it into a glazed earthen Pan, and by the gentle Heat of a *Balneum Maria* exhale about one fourth thereof, then distill the Remainder by the Alembic; the Fire being gradually increased in the Operation, so long as the Spirit comes off clear. E.

The London Dispensatory orders it thus,

Let Vinegar be distilled with a gentle Heat, as long as the Drops fall free from any Empyreuma. If some Part of what comes first off be thrown away, what is reserved will be stronger.

This is more properly called *Acetum distillatum*, than *Spiritus Aceti*, because in the Distillation of Vinegar, the Phlegm rises first, and comes over, leaving the heavier Acid behind; whereas in the Distillation of Spirits, the Spirit first comes over, and leaves the Water behind. The Virtues of distill'd Vinegar may be learn'd from those of Vinegar. But I must remark that the Vinegars generally made use of in England, are far inferior in Virtues and Efficacy to the true French Vinegar, made of strong Wines by a particular Process.

Acetum Lithargyrites.

Litharge Vinegar.

Take four Ounces of Litharge of Gold, and one Pint of the best Vinegar: Digest them in a Sand Heat for four Days, often shaking the Glass, then filter the Liquor. E.

X x 2

This

This seems only intended for external Uses as a Cooler.

Acetum Rosaceum.

Vinegar of Roses.

Take of red Roses clipp'd from their white Heels, one Pound; the best Vinegar, one Gallon; let them stand to infuse in the Sun, put up in a well closed Vessel, for forty Days; then strain off the Liquor. The Operation may be sooner perform'd by letting them boil in *Balneo Mariæ* for some Hours. *E.*

This, as *Quincy* informs us, is seldom used, except to embrocate the Head and Temples, in some Kinds of Head-Achs, in which it frequently does Service.

Vinegars may be prepar'd in the same Manner from Rue, Elder, and other Vegetables. That of Rue should seem to be most considerable with Respect to its Medicinal Virtues.

Acetum Scilliticum.

Vinegar of Squills.

Take of Squills, cut small, one Pound; best Vinegar, three Quarts; let them stand to infuse in the Sun, as was order'd of Vinegar of Roses, and afterwards press and strain off the Liquor. *E.*

The Proportion of the Squills to the Vinegar is the same here, as in the *London Dispensatory*, but in the latter, the Digestion is order'd to be made in a gentle Heat, then the Vinegar is order'd to be press'd out, and set by till the Dregs are subsided, and afterwards a twelfth Part of Proof Spirit, is to be added to the depurated Vinegar, in order to preserve it from contracting Dregs by Time. But I am far from believing this Addition of any Service to the Medicine, for the Spirit, so far as it acts at all, must impair its Virtues. Vinegar of Squills was a Medicine

very much celebrated amongst the Antients. It is said to be the Invention of *Pythagoras*, or that he learned the Use of it from *Epimenides*. He began at the fiftieth Year of his Age, to take some of this Vinegar every Day, and to this it was attributed that he lived in perfect Health to the Age of a hundred and seventeen. It is esteem'd to preserve the Hearing, and open the auditory Passage, used by way of Gargarism. *Dioscorides*, who orders this Medicine to be made by infusing in the Sun, informs it is good to consolidate the too lax and humid Gums, and fasten loose Teeth. It is excellent to heal putrid Ulcers in the Mouth, and for an offensive Breath. Drinking of it hardens the Throat and Jaws, and makes them callous; it helps the Voice, and renders it clear and sonorous. It is administer'd to such as labour under Infirmities of the Stomach, have weak Digestions, to epileptical, vertiginous, melancholy, and mad People. It is given also in hysteric Fits, in Disorders of the Spleen, and the Sciatica. It wonderfully clears and revives infirm Persons, renders the Body sound, and gives a good Colour. It quickens the Sight, and dropped or poured into the Ears, helps Thickness of Hearing. But he condemns the Use of it in internal Exulcerations.

Acetum Theriacale.

Treacle Vinegar.

Take of the Treacle of *Andromachus*, or that of the College of *Edinburgh*, one Pound; best Vinegar, two Quarts; digest them together with a gentle Heat, for three Days, and afterwards strain off the Liquor. *E.*

It is said, that this is very powerful in raising a Sweat, and therefore it must be a good Medicine where Sweating

Sweating is of Service. But such great Mischiefs are daily done by extorting Sweats imprudently, that it should not be attempted without great Caution and Judgment; for nothing is more frequent than Fevers of the most malignant Kind, ex-

cited from very small Beginnings, a Cold for Example, or slight Fever, which would have terminated in a few Days without any Assistance from Medicine, by the imprudent Use of heating Medicines and Diaphoretics.

CH A P. VI.

Of TINCTURES.

General Rules for extracting of TINCTURES.

I. **L**ET the Vegetables be such as were lately and moderately dried; unless they are order'd fresh gather'd: They ought likewise to be sliced and bruised before the *Menstruum* is put to them.

II. When Digestion is performed in a Bath Heat, the whole Work depends upon well regulating the Heat, which ought all along to be very gentle, unless where the Ingredients are of a hard Texture; in which Case, the Fire may at length be so far increased as to make them boil a little.

III. Very capacious circulating Vessels should be used for this Purpose; and ought to be heated before their Junctures are closed.

IV. The Vessel should be frequently shook during the Time the Digestion is in hand.

V. Let Tinctures be clarified by settling, before they pass the Filter or Strainer.

VI. The *Edinburgh Dispensatory* farther very prudently advises, never to substitute Malt, Molasses, or any other Spirit, instead of a true rectify'd Spirit of Wine, in those Tinctures and Spirits destin'd for internal Uses.

Boerhaave informs us that Alco-

hol, when perfectly pure, scarce extracts any thing more from well dried compounded Vegetables, than the inflammable Parts, Spirit, Balsam, Oil, Colophony, Resin, and resinous Gum, and what is merely saponaceous; leaving a pure, dry Salt and Earth behind. If, therefore, the Artist knows that all the particular Virtue required resides in these Parts, then the Operation must be performed with pure Alcohol alone; but when the Virtues required lies in a Mixture of the oily, resinous, saline, and saponaceous Parts together, it is better to use the common rectify'd Spirit than Alcohol; because that Spirit acts by its aqueous Part, upon what is saline and saponaceous, and by its Alcohol, upon what is balsamic, oily, and resinous; so that by this Means the united Virtues may be obtained in the Tincture. This is evident in the Roots of Hellebore, Hermodactyls, Jalap, Mechoacan, and Turbith; because the Tinctures drawn from them with a Spirit only once rectified, purge much better than those extracted by pure Alcohol. For if a resinous Tincture be drawn by Alcohol from Jalap, it purges less; whilst the Remainder being boiled in Water, communicates a purging Virtue there

thereto. But if the Tincture be extracted with common Spirit, it proves highly purgative; and the Remains contain scarce any thing worth the extracting. Hence we learn, that a fixed alkaline Salt is not required in the making of many Tinctures, because it would either destroy, or change their particular Virtues; and that they are not always to be made with Alcohol: But we are first to consider what Spirit should be used. All the Tinctures, prepared with pure Alcohol, will burn entirely away, almost like pure Alcohol itself; whence it is manifest that this Menstruum extracts only the inflammable Part from the Compound, and leaves the rest behind. If, therefore, the Virtue of a Plant entirely resides in the saline, saponaceous Part, to boil it with Water is better than Alcohol. The Opium dissolved in Water is the best, the next is that dissolved in Wine, and the next in Spirit of Wine, but always the worse, the better the Spirit.

Tinctura Amara.

The bitter Tincture.

Take of Gentian Root two Ounces, and of the outer yellow Rind of Seville Orange Peel dried, one Ounce, of the lesser Cardamom Seeds husk'd half an Ounce, of Proof Spirit a Quart. Digest without Heat, and then strain. *L.*

This seems to be intended for a Stomachic, and to supply the Place of those bitter Drops and Tinctures, which are commonly used in the Taverns by way of Whet. I am afraid that the Spirit in such Bitters, do more Prejudice to the Stomach than the Advantage receiv'd from the aromatic bitter Ingredients can compensate, tho' they may excite a temporary Appetite.

Tinctura Antimonii.

Tincture of Antimony.

Take of Antimony and Nitre, each two Ounces; reduce them to Powder; and throw it by Degrees, into four Ounces of Salt of Tartar, contain'd in a Crucible, and made to flow by a violent Fire; let them continue in Fusion for half an Hour: then pour the Mixture into an Iron Mortar, made hot and dry to receive it: Pulverise the Mass, suffer it to cool, throw it into a Matraass, and lastly, pour thereon a Quart of rectified Spirit of Wine: Digest them together for eight Days with a gentle Heat of a *Balneum Mariæ*, and afterwards strain off the Tincture, *E.*

Another Tincture of Antimony, is directed in the *London Dispensatory* to be prepared thus,

Take of any fixt alkaline Salt, a Pound, of Antimony half a Pound, of rectified Spirit of Wine, a Quart: Mix the Antimony reduced to Powder, with the Salt, and melt them together for an Hour in a strong Fire, then pour all out, and being pulverized, pour on the Spirit of Wine, digest for three or four Days, and afterwards strain off. *L.*

Tinctura Antimonii acris simplex.

The simple acrid Tincture of Antimony.

This is directed to be made in the *Brandenburgh Dispensatory*, by digesting the *Scoriæ* of the Martial Regulus of Antimony just made, and hot, in highly rectify'd Spirit of Wine. Another acrid Tincture of Antimony, called the *Reguline Tincture*, is made by

di-

digesting equal Parts of the Martial *Regulus* of Antimony detonated with an equal Quantity of Nitre, in highly rectified Spirit of Wine.

It is said, that neither of these take up much from the Antimony, but that all their Virtues are borrowed from the Nitre render'd alkaline and acrid, by being fused with Antimony.

These Tinctures, given in a proper Vehicle, and a considerable Dose, are said to bring away the serous Humours of cachetic Patients. They are also esteem'd good Deobstruents in hypochondriac Medicines. *Stabl* calls that Tincture of Antimony, which is made by throwing diaphoretic Antimony, immediately after Detonation, into Spirit of Wine, and digesting it. *Tinctura Antimonii alcalina acris*. The Doses of these Tinctures are from ten to sixty Drops.

Tinctura Antiphtbifica.

Tincture against the Phthisic.

Take of the *Saccharum Saturni* one Ounce and an half; Vitriol of Iron, one Ounce; rectify'd Spirit of Wine, one Pint; and without Heat draw a Tincture. *E.*

This has been long in great Esteem both in *England* and abroad, as a Kind of Specific in hectic Fevers, and is said to be good in relax'd Habits, as it braces powerfully. But as I am bound by no Authorities whatever, I think it my Duty to declare, that I esteem it a very dangerous Medicine, if given in Doses sufficient to answer any Purpose; and I have known it excite excessive Gripes, excessive Faintings, and Weakness; all which are the known Effects of Lead taken internally.

Tinctura Saturnina.

The Saturnine Tincture.

Take Sugar of Lead, green Vitriol,

of each two Ounces, of rectify'd Spirit of Wine a Quart. Reduce the Salts separately to Powder, and put them into the Spirit, then digest without Heat, and filtre the Spirit thro' Paper. *L.*

In the Remarks on the Translation of the last *London* Dispensatory, we are told, that if Heat is used in the making of this Tincture, it will unawares loose its Colour, after it has begun to promise a good one.

Tinctura Aromatica.

Aromatic Tincture.

Take of Cinnamon six Drams, of the lesser Cardamom Seeds husk'd three Drams, long Pepper, and Ginger of each two Drams, of Proof Spirit a Quart. Digest without Heat, and strain the Spirit off. *L.*

This is directed to be made without Heat, because that would dissipate the volatile aromatic Parts, and injure the Medicine. The Virtues of this Tincture, may be understood by those of the Ingredients. It is used in making the *Elixir Vitrioli Acidum*.

Tinctura Balsamica.

Balsamic Tincture.

Take of Balsam of Capivi, one Ounce; *Peruvian* Balsam, three Drams; Balsam of *Tolu*, two Drams; Benjamin, half a Dram; *English* Saffron, one Scruple; and of rectify'd Spirit of Wine, one Pint: Digest them for four Days in *Balneo Mariæ*, and afterwards strain off the Tincture. *E.*

This is intended as a Balsamic as its Title imports, and as such is of very extensive Use in Medicine. But I don't comprehend the Reason why so many different Sorts of Balsams are made use of. For if Balsam of Capivi is better than that of *Tolu*, why should that of inferior Virtues be employ'd at all in this Medicine?

It would be coming nearer to the Point, to determine which is of most Efficacy, and use that, omitting the other.

Tinctura Cantharidum.

Tincture of Cantharides.

Take two Drams of Cantharides, a Pint and a half of rectify'd Spirit of Wine: Digest them with a very gentle Heat for two Days; and pour to the strained Tincture one Ounce of Balsam *Capivi*, half an Ounce of the Resin of *Guaiacum*, and half a Dram of Cochineal: Digest them in *Balneo Mariæ* for four or five Days, then strain off the Tincture, to which add two Drams of Camphire, and one Dram of the distilled Oil of Juniper. *E.*

This seems to be the best Tincture of *Cantharides* I have met with, and is render'd more safe by the Addition of Camphire. The Translator of the *Edinburgh Dispensatory* informs us, that it is a better Preparation than that troublesome one so highly magnified by Dr. Quincy, and deserves the same Character, especially for Gleet and seminal Weaknesses, when other Remedies fail. The Character referr'd to of Quincy's Tincture, is its being a most excellent Medicine, in many Cases where we have not its *Succedaneum*, nor any thing tending that Way. It is a most stimulating Cordial, and cannot fail to excite conjugal Intercourse, where a Constitution, by any Misfortune has fallen into a Coldness or Indifferency that way; for (if the Expression may be allow'd) where there is Fuel, it will infallibly kindle it. The *Satyrior*, and all of that Tribe, are not to be compared to it. In many Cases also, where sloughy and cold Humours have clogg'd the Reins and Genital Parts, and thereby occasion'd other Mil-

chiefs, besides an Inability to Coition, this Medicine is of mighty Service; and will answer where the most efficacious Balsams and Turpentine fail. It may be given from ten to one hundred Drops, in a Glass of Canary, or any other Liqueur which a Patient may like better. But notwithstanding these Commendations of this Medicine, which indeed cannot be greater than it deserves; yet none but the truly Skilful must dare to meddle with it: For by an injudicious Administration, it may occasion Stranguries, Erosions, Excoriations, and even Convulsions.

Tinctura Cantharidum.

Tincture of Cantharides.

Take of Cantharides bruised two Drams, of Cochineal half a Dram, of Proof Spirit a Pint and half. After Digestion filtre the Spirit thro' Paper. *L.*

The Balsam of *Capivi* in the preceding Tincture of the *Edinburgh Dispensatory*, renders it a much better Medicine for that Addition, as appears from what I have said of Balsamics in general, under the Article of Balsamics.

Tinctura Cardamomi.

Tincture of Cardamom Seeds.

Take of the lesser Cardamom Seeds freed from their Husks half a Pound, of Proof Spirit, a Quart. Digest without Heat, and strain off the Spirit. *L.*

The Medicinal Virtues of this may be known from those of the Cardamoms.

Tinctura Castorei.

Tincture of Castor.

Take of *Russia* Castor, an Ounce and half; rectify'd Spirit of Wine a Pint; digest them together in a gentle Heat for four Days, and after-

afterwards strain off the Tincture.
E.

In the *London Dispensatory*, they order two Ounces of the Castor, to a Quart of Proof Spirit, and to be digested for ten Days, without any Heat at all. And Proof Spirit has been found a better Menstruum to extract the Virtues of the Castor. The Medicinal Virtues may be understood by those of Castor.

Tinctura Cephalica.

Cephalic Tincture.

Take of Piony Root, two Ounces; the Roots of *Cassuminiar*, and white Dittany, each six Drams; wild Valerian Root and Mistletoe of the Oak, each one Ounce; Peacock's Dung, and Rosemary Flowers, each half an Ounce; and of *French* white Wine, six Pints: Digest them for four Days, and then strain off the Tincture.
E.

This is intended as a Cephalic, as its Title imports, and is calculated for Disorders of the Head, for which the Ingredients which enter its Composition are very much recommended.

Tinctura Cephalica purgans.

Purging Cephalic Tincture.

This is made, by adding to the preceding Tincture, two Ounces of Senna Leaves; one Ounce of black Hellebore Root; and a Quart of *French* white Wine. E.

This should seem to be a very good Purge in Disorders of the Head.

Tinctura Cinnamomi.

Tincture of Cinnamon.

Take of Cinnamon an Ounce and a half, of Proof Spirit a Pint. Digest them without Heat, and strain the Spirit off. L.

The Virtues of this may be understood by those of Cinnamon.

Tinctura Corticis Peruviani simplex.

The simple Tincture of the Peruvian Bark.

Take of the Peruvian Bark four Ounces, of Proof Spirit a Quart. After Digestion strain the Spirit off. L.

We are told by the Author of the the *Pharmacopœia Reformata*, that a Tincture of the *Peruvian Bark* has long been pretty much in Esteem, and usually kept in the Shops; but as the College have not set down any Standard Form for making it in their *Pharmacopœia*, this Tincture has been variously prepared, at the Discretion of the Apothecary or Chymist. Some have employ'd a highly rectify'd Spirit of Wine as a Menstruum, which they have taken Care fully to saturate, by Digestion on a large Quantity of Bark. Others have thought to assist the Action of the Spirit by the Addition of a fixed alkaline Salt; and many have given the Preference to a vitriolic Acid, which has been supposed to improve the Medicine, by adding to the Roughness of the Bark, and by giving a greater Consistence to the Spirit, which enabled it to sustain more than it could by itself. These various Preparations have their various Uses, and may to good Purpose be applied by the Skill of the Physician. For general Use the Form introduced here is a very convenient. A weak Spirit is well adapted Menstruum to extract the whole Virtues of the Bark, as it equally affects its resinous and saline Parts, and therefore makes as little Alteration as possible in the Medicine itself.

Tinctura Corticis Peruviani volatilis.

Volatile Tincture of the Peruvian Bark.

Take of the Peruvian Bark four Ounces, of Spirit of *Sal Armoniac*

moniac a Quart. Digest without Heat in a close Vessel, and then strain the Spirit off. L.

The last quoted Author remarks, that the volatile Spirit of *Sal Armoniac* has but lately been applied to the Bark as a Menstruum, on which it without Dispute acts powerfully, but its acrimonious Pungency is so great as to make its Doses very small. It might perhaps therefore conveniently be lower'd by the Addition of an agreeable simple Water, which would effectually remedy this Inconvenience, and render it more palatable, and leave the Menstruum sufficiently strong for the Purpose it is designed.

Tinctura Croci.

Tincture of Saffron.

Take of *English* Saffron one Ounce; and *French* Brandy, a Pint: Digest them together for three Days, then strain off the Tincture. E.

This Tincture is also prepared with Canary Wine. The Virtues of this may be known from those of Saffron.

Tinctura Foetida.

The fetid Tincture.

Take of *Asa Foetida* four Ounces, of rectified Spirit of Wine a Quart. After Digestion strain the Spirit off. L.

The Author of the *Pharmacopœia Reformata* is of Opinion, that a highly rectify'd Spirit is not so proper a Menstruum as a low one, for extracting this Tincture. It is not worth disputing, because *Asa foetida* in Substance promises greater Efficacy than its Tincture. The Compilers of the *London* Dispensatory however, have judged extremely well, in giving this Tincture, and many others, in the simple Manner here directed; for those which are more complex, are less to be depended upon, and more uncertain in their Effects, causing besides great Confusion and Perplexity to the Prescriber.

Tinctura Fuliginis.

Tincture of Soot.

Take of Wood Soot two Ounces, of *Asa foetida* one Ounce, of Proof Spirit a Quart. After Digestion strain off the Spirit. L.

This is directed in the *Edinburgh* Dispensatory exactly in the same Proportion: It is esteem'd a very good Cephalic and nervous Medicine, and has lately been in much Repute for the Cure of Epilepsies and Convulsions.

Tinctura Guaiacina volatilis.

Volatile Tincture of Gum Guaiacum.

Take of Gum Guaiacum four Ounces, of *Spiritus volatilis aromaticus*, or aromatic volatile Spirit, a Pint and a half. Digest without Heat in a well closed Vessel, and then strain the Spirit off. L.

It has been for some time the Custom both amongst Empirics and Physicians, to give a strong Tincture of Gum Guaiacum for Rheumatic and Gouty Pains, and I have known it sometimes succeed, but more frequently not. This here directed seems to be the best I have met with; but they all excite too much Heat, a Circumstance attended with many Disadvantages, in Disorders attended with a Sickness of the Juices.

Tinctura Hellebori nigri.

Tincture of black Hellebore.

Take of black Hellebore four Ounces; Cochineal, half a Dram; bruise them, and pour thereon a Quart of *Spanish* white Wine; digest them together, in a very gentle Heat, for four Days; and afterwards strain off the Tincture. E.

In former Dispensatories, when the Tincture of Hellebore has been ordered to be extracted with a spirituous Menstruum, Salt of Tartar has been generally added, in order to open

open the Body of the Root; but in this it is omitted as not necessary. This is a very good Diuretic and Deobstruent, and is much used for promoting the menstrual Discharge, in many Cases where Steel acts too forcibly, and excites great Commotions in the Constitution. For a farther Knowledge of its Virtues, see those of Hellebore.

The *London Dispensatory* directs a Tincture of black Hellebore under the Title of *Tinctura Melampodii* in much the same Proportions, but in this Proof Spirit is ordered instead of *Spanish* Wine as a Menstruum.

Tinctura Jalappæ.

Tincture of Jalap.

Take three Ounces of Jalap Root, reduced to a gross Powder; pour upon it a Pint of rectified Spirit of Wine; let them digest for eight Days, in a gentle Heat; then strain off the Tincture. E.

In the *London Dispensatory*, they order eight Ounces of Jalap, to a Quart of Proof Spirit.

Boerhaave is of Opinion, that Proof Spirit extracts the Tincture of this Root, much better than one which is higher, because it dissolves both what is saline and saponaceous, and what is balsamic, oily, and resinous. This is a very pretty and convenient Medicine, and may very properly be added to cathartic Infusions, Decoctions, and Solutions in order to quicken their Operation, in the Quantity of a Dram or more. *Boerhaave* says, that if half an Ounce of such a Tincture, be mixed with an equal Quantity of the Syrup of Buckthorn, a Potion will thus be obtained, which without occasioning much Disorder, plentifully purges Water; whence we are furnished with an excellent Hydragogue in those Distempers that require it.

Tinctura Jalappæ composita.

Compound Tincture of Jalap.

Take of Jalap Root, six Drams; black Hellebore Root, three Drams; Juniper Berries and the Shavings of *Guaiacum*, each half an Ounce; and of *French Brandy*, one Pint and an half; digest them for three Days, and strain off the Tincture. E.

This is ordered in the *Edinburgh Dispensatory*, but it seems here to be of but little Use, for the Tincture of Hellebore, and Juniper Water, may be added extemporaneously to the simple Tincture, if they should be thought necessary.

Tinctura Japonica.

Tincture of Japan Earth.

Take of Japan Earth three Ounces; of Cinamon two Ounces, of Proof Spirit a Quart. After Digestion strain the Spirit off. L.

This Tincture as it is more simple, is much preferable to any we have yet had in the Dispensatories, and is of Use in Cases where the Drug from whence it takes its Name, is proper, and is particularly excellent in a Cough; but I know of no Virtues it is possessed of, but what the *Japan* Earth has alone in a greater Degree.

Tinctura Ipecacuanhæ.

Tincture of Ipecacuanha.

Take of Ipecacuanha, in Powder, an Ounce; Chochineal, a Scruple; *Spanish* white Wine a Pint; digest for two Days and filtre. E.

Of late Years a Tincture of Ipecacuanha has been very much used as an Emetic, because not attended with some Inconveniencies, which are said to happen from the powdered Root in some Constitutions, wherein it causes an Asthma. It is therefore proper to have some Standard in the Shops,

Shops, because when it is wanted on any sudden Occasion there is not Time to make it according to any extemporaneous Prescription.

Vinum Ipecacuanhæ.

Wine with Ipecacuanha.

Take of the Root of Ipecacuanha, two Ounces; of the yellow Part of *Seville* Orange-peel, dried, half an Ounce; of Canary a Quart. Infuse without Heat, and strain. L.

If this is intended as an Emetic, it will not be at all the better for the Orange Peel, but if as an Alterative, for the Cure of a Diarrhæa, or Dysentery it is more proper. The Author of the *Pharmacopœia Reformata* affirms, that for the Purpose of an Emetic, the Ipecacuanha is best prepared by infusing it in warm Water, as may be fairly deduced from its Analysis, and which has been further confirmed by repeated Trials.

Tinctura Laccæ.

Tincture of Gum-Lac.

Take of Gum Lac, one Ounce; Myrrh half an Ounce; reduce them to Powder; then pour on as much Oil of Tartar *per Deliquium*, as will make the Whole into a soft Paste; after which, dry it by a gentle Fire, and add thereto a Pint and half of Scurvy Grass; digest all in *Balneo Mariæ* for four Days; and then strain off the Tincture. E.

Boerhaave directs a more simple Tincture of Gum Lac to be thus made:

Take of pure Gum Lac, reduce it to fine Powder; and moisten it with Oil of Tartar *per Deliquium*, so as to make it into a soft Paste, which being put into a Glass Vessel, place it in a gentle Heat. Then take out the Glass, and leave it in the open Air without Fire, where the Oil of

Tartar will again resolve; after which it is to be dried a second Time in a gentle Heat; and thus by repeating the Liquefaction, and the drying alternately, the glassy Tenacity of the Gum will be broke, and resolved into a Liquor of an elegant purple Colour. Then let it again be gently dried, and carefully taken out of the Glass, as being thus prepared for affording a Tincture with Alcohol. Put the Matter into a tall chymical Glass, and pour upon it pure Alcohol, enough to float three or four Inches above it; stop the Glass with Paper, and set it in a Furnace, that it may simmer for two or three Hours, which may be done without Danger of losing the Alcohol, by Reason of the long and slender Neck of the Glass. Let the Liquor cool, and pour off the clear Tincture, by a gentle Inclination of the Vessel, into another Glass, that is to be kept well stopped. The Remainder may be treated in the same Manner with more Alcohol, and the Tincture poured to the former, till the Matter, by boiling, will no longer tinge the Alcohol; after which the Matter may be thrown away as exhausted. The several Tinctures being put together, and purified from their Fæces by standing, are to be distilled by a very gentle Fire, in a Glass Body, till one half of the Alcohol is come over, whereby being thickened, the Remainder is to be kept for Use.

This Tincture is of great Virtue in curing the Disorders of the Gums, Mouth, and Teeth, in the Scurvy, being frequently used by rubbing it on the Parts; and taken externally, it has the same Virtue, and safely cures that Disorder, if not attended with too much Heat. It is also of great Use in the Gout, the Rheumatism,

tism, and Scurvy, from a sluggish Cause, as also in a Leucophlegmatia, Dropsy, or the like. It may be taken three Times in a Day, in Spanish or Canary Wine, after the Stomach has been first cleansed and emptied. It has a grateful Odour and Bitterness, with an agreeable Astringency, that shews its strengthening Virtue, and is therefore greatly commended in the Cure of the *Fluor Albus*.

Tinctura Martis.

Tincture of Steel.

Take Filings of Iron, without any Preparation, three Ounces; dulcified Spirit of Salt, two Pints; digest in a gentle Sand Heat, for three Days, and filtre the Tincture. E.

The Compilers of the last Edition of the *Edinburgh Dispensatory* have substituted this Tincture of Steel in the Room of two others in their former Editions, that of *Ludovicus* and that of *Mynsicht*. The *London Dispensatory* orders a Tincture of Steel under the Title of,

Tinctura Martis in Spiritu Salis.

Tincture of Iron in Spirit of Salt.

Take of the Filings of Iron, half a Pound, of Glauber's Spirit of Sea-Salt three Pounds, of rectified Spirit of Wine three Pints. Digest the Filings in the Spirit of Salt, without Heat, as long as the Spirit will work on them, then after the Fæces have subsided, evaporate the Liquor poured off clear, to one Pound, and to this add the Spirit of Wine. L.

There is another Tincture of Steel directed in the *London Dispensatory* under the Title of,

Tinctura Florum Martialis.

Tincture of Martial Flowers.

Take of Martial Flowers four Oun-

ces; of Proof Spirit a Pint. After Digestion strain the Spirit off. L.

The late Mr. *White* used to take equal Parts of *Sal Ammoniac*, and Iron Filings, and calcine them over a gentle Fire, in a flat unglazed earthen Vessel, keeping them stirring all the Time, till they concreted together into Lumps; this powdered gives almost immediately a Tincture to the Spirit poured upon it. This and the preceding are intended to imitate *Mynsicht's* Tincture of Steel, and afford better Medicines, with much less Trouble. This Preparation of Iron with *Sal Ammoniac*, will dissolve in the Air *per Deliquium*, and this Oil or *Liquamen*, is a very good Medicine where this Mineral is proper, perhaps inferior to none.

Tinctura Martis Ludovici.

Ludovicus's Tincture of Steel.

Take one Part of the Vitriol of Iron, not acid, but perfectly saturated; four Parts of Cream of Tartar, and twenty Parts of Rain Water; boil them together in a Glass Vessel, often stirring them with a Stick, till the Mass becomes grey, thick, and almost consistent; but with Care to avoid even the least burning. Put the Mass into a tall Bolt Head, pour common Spirit of Wine thereon, so as to float four Inches above it; boil them together for an Hour or two, and a red Liquor will be obtained; when cold decant and filtre it. Treat the Remainder with fresh Spirit as before, and continue to do this so long as the Spirit acquires any Redness; then put the several Parcels together, which thus make *Ludovicus's* medicated Tincture of Iron.

Physicians having observed, that the excellent medicinal Virtues of Iron, had their Effect so long as the Iron continued dissolved in a mild Acid, but

but vanished, and were precipitated into an unctuous Calx, upon meeting with an Alkali, hence prudently joined the Salt of Iron with a vegetable Acid, in Expectation that it might thus pass and act upon all the Vessels of the Body, whilst it more permanently retained a saline Nature; and this was the Reason of joining the Salt of Iron with the vegetable oily Salt of Tartar, to prevent its being easily precipitated in the Body into a *Crocus*, or astringent Calx. This Tincture has the Virtue of opening, attenuating, strengthening, and gently evacuating by the Belly and Kidneys; and hence proves curative in leucophlegmatic, scorbutic, isteric, hypochondriacal, and hysterical Cases, or when the Body is relaxed, weak through the Sluggishness of the Parts, ricketty, or abounding with Worms. It is taken in a Morning fasting, in the Quantity of a Dram, diluted with six times its Weight of Water, repeating it thrice, and each Time drinking after it a Quarter of a Pint of thin Whey, walking gently upon it, so as not to sweat; this may be continued for nine Days, with great Advantage. A few Drops of it may be given to Children troubled with Rickets or Worms, mixed with Syrup of Honey.

Tinctura Menthae.

Tincture of Mint.

Take of Mint Water, one Pint; of the dry'd Leaves of Mint, one Ounce; macerate them in a close Vessel for four Hours in a warm Place, and strain off the Tincture. E.

This is added in the last Edition of the *Edinburgh Dispensatory*, and may be very useful in Cases where Mint can be of Service, especially as a Stomachic.

Tinctura Myrrhae.

Tincture of Myrrh.

Take of Myrrh three Ounces, of Proof Spirit a Quart. Digest them together, and then strain the Spirit off.

Helmont imagined, that if Myrrh could find Entrance into the innermost Recesses of the Body, it would have a great Efficacy in the prolonging of Life, so far as this might be expected from an uncorrupted State of the vital Balsam. This Tincture by its detergent, embalming, or balsamic Virtue, excellently heals any foul Ulcers of the Mouth, Nostrils, Gums, or other Parts of the Body, by their being touched or rubbed therewith. If the Bodies of dead Creatures be penetrated with this Liquor, they having been first warmed, and then dried, it preserves them uncorrupted. Given internally, it is an admirable Remedy in all languid Cases, proceeding from a simple Inactivity. It is principally serviceable in those Female Disorders which proceed from an aqueous, mucous, sluggish Indisposition of the Humours, and a Relaxation of the Solids; and therefore has extraordinary Effects in the *Fluor Albus*, and all the Diseases arising from the same Cause. See the Article *Myrrha*, in the *Materia Medica*.

Tinctura Myrrhae & Aloes.

Tincture of Myrrh and Aloes.

Take of Myrrh reduced to Powder, two Ounces; rectified Spirit of Wine, a Quart; let them stand together in *Batneo Mariæ* for eight Days; then add of the Powder of *Hepatic Aloes*, one Ounce; and digest again for two Days; then strain off the Tincture. E.

The Aloes here is prudently ordered to be added, after the Tincture

of Myrrh is extracted, because if both were put in together, the Aloes would only saturate the Menstruum, leaving the Myrrh untouch'd.

Tinctura Opii, seu Laudanum liquidum.
Tincture of Opium, or Liquid Laudanum.

Take of crude Opium, without any previous Preparation, two Ounces; *English* Saffron one Ounce; *Canary* Wine, and *French* Brandy, each ten Ounces : Let a Tincture be extracted by a gentle Sand Heat, which is to be strain'd. E.

Tinctura Thebaica.

Thebaic Tincture.

Take of Opium strain'd two Ounces, Cinnamon, Cloves, of each a Dram, of white Wine a Pint. Infuse without Heat for a Week, and then strain off the Wine thro' Paper. L.

This differs very little from *Sydenham's* Liquid *Laudanum*, except in the Alteration of the Name. It would have been no great Disadvantage to the Medicine, if the Cinnamon and Cloves were also left out, for these add no one Virtue to the Medicine, and mend the Taste but very little. And to confess the Truth it would be no Misfortune to Practice if all the Tinctures of Opium and Laudanums were omitted; for crude Opium without any previous Preparation, answers all Intentions much better, and the Dose of this is more easily ascertain'd. *Boerhaave* asserts, that Opium dissolved in Water is the best, the next is that dissolved in Wine, and the next in Spirit of Wine; but always the worse, the higher the Spirit.

Tinctura Rhabarbari.

Tincture of Rhubarb.

Take of Rhubarb slic'd and bruis'd

one Ounce; Tartar of Vitriol half a Dram; Cochineal, a Scruple; Cinnamon Water prepared without Spirit, a Pint; digest them together in a warm Place one Night; and then strain off the Tincture. E.

This seems to be a much better Medicine, than the common Tinctures of Rhubarb made with Spirit, but I should prefer common Water, as a Menstruum preferable to the Cinnamon Water, because Cinnamon, if it does any thing, checks the Operation of the Rhubarb. I am sensible, that as Rhubarb is esteem'd a good Medicine to check a Diarrhæa, that the Cinnamon Water may be order'd to assist the Rhubarb in preventing too copious and frequent Stools, but it requires the greatest Judgment to determine when it is necessary and proper to stop Discharges of the Excrements by the Anus, which I should apprehend ought seldom to be done, whilst there remains any thing in the Intestinal Tube, that stimulates to Excretion, and offends them. This Caution I judge the more necessary, because I have frequently known fatal and shameful Mistakes made in this Respect, where the Patient has been nearly destroy'd by checking a critical Looseness, which would otherwise have cur'd the Distemper, and which even has done it, after being brought on again, and promoted.

Tinctura Rhei Amara.

Bitter Tincture of Rhubarb.

Take of Rhubarb, one Ounce; Gentian, one Dram and a half; *Virginia* Snake Root, one Dram; Cochineal, one Scruple, and of *French* Brandy, one Pint: Digest them for two Days, and then strain the Tincture. This may be likewise made with *Spanish* white Wine, E.

I should

I should much prefer the Wine to the Brandy.

Tinctura Rhei dulcis.

Sweet Tincture of Rhubarb.

Take of the best Rhubarb, and sliced Liquorice, each two Ounces; Raisins of the Sun stoned, one Ounce; Winter's Bark, the lesser Cardamoms, each two Drams: And of French Brandy, one Quart: Digest for two Days, add to the Tincture, when strained, three Ounces of white pulverized Sugar Candy, and digest again till the Sugar Candy is dissolved. E.

Tinctura Rhabarbari Vinosa.

Tincture of Rhubarb in Wine.

Take of Rhubarb two Ounces, of the lesser Cardamom Seeds husk'd half an Ounce, of Saffron two Drams, of white Wine a Quart. Infuse three Days without Heat, and strain. L.

Tinctura Rhabarbari spirituosæ.

Tincture of Rhubarb in Spirit.

Take of Rhubarb two Ounces, of the lesser Cardamom Seeds freed from their Husks half an Ounce, of Saffron two Drams, of Proof Spirit a Quart. Digest without Heat, and strain the Spirit off. L.

With Respect to these Tinctures of Rhubarb, I know of no great Use they are of in Practice; for Rhubarb in Substance has better Effects. They may indeed, be more proper in Clysters; and may be more agreeable to those who chuse to take a Draught, rather than a Powder, or Bolus; but then I should prefer an Infusion in Water, or Wine, to one made with Brandy; because it answers the End of a Laxative better, and is not attended with the ill Effects of a Dram.

Tinctura Rosarum.

Tincture of Roses.

Take red Rose Buds, the white Heels

being cut off, half an Ounce of the strong Spirit of Vitriol, called the Oil, one Scruple, of boiling Water, two Pints and a half, of double refined Sugar one Ounce and half. First add the Spirit of Vitriol to the Water in a Vessel of Glass, or Earth glazed, and then infuse the Roses, strain the Liquor when cold, and add the Sugar. L.

This is intended for an Astringent and Cooler, and is a very proper Medicine in Hæmorrhages, and excessive febrile Heats, and is very good in many Cases as a Gargarism.

Tinctura Sacra.

Tincture of Hiera Picra.

Take of Succotrine Aloes, in Powder, an Ounce, of the lesser Cardamoms, and Virginian Snake-Root, each one Dram; Cochineal, a Scruple; Spanish white Wine, a Pint and a half: Digest for two Days in a gentle Heat; and strain. E.

That in the preceding London Dispensatory is by many prefer'd to this. It is made by digesting an Ounce of the *Species Hiera Picra*, (which see) in a Pint of white Wine. It is intended as a stomachic Purge, but it has much better Effects if given in extremely small Doses, and those frequently repeated by way of Alterative, one Spoonful for Example at Night going to Bed. Taken in this Manner, it is very effectual in mending the Appetite, and is of good Service in a *Chlorosis*, Cachexy, and Suppressions of the Menstrues.

In the last London Dispensatory it is thus directed.

Take of Succotrine Aloes eight Ounces, of Winter's Bark so called two Ounces, of white Wine five Quarts. Pulverize the Aloes and Bark

Bark separately, then mix them and pour on the Wine, infuse for a Week or longer without Heat, the Glafs being often shook, and lastly strain the Wine off.

It is convenient to mix some clean white Sand with the Powders, that the Aloes may not concrete into a Lump. L.

The Compilers of the last College Dispensatory gave us the following Remarks upon this Medicine.

Hiera Picra is a very ancient Composition; but as it was originally an Electuary, and now with us is more used in Tincture, its Ingredients deserve a particular Review, that so eminent a Medicine may be render'd as little disagreeable in Taste and Flavour as possible, a Circumstance much more worthy of Regard in its present, than in its antient form. The original Species, besides the Aloes, were Cinnamon, Spikenard, Xylobalsamum, and often *Schoenanthus* also. Of these the *Xylobalsamum* is little known to us; nothing has been brought into *Europe* under that Name, but dry Sticks without any Taste or Smell. Our *Pharmacopœia* has supply'd this Defect, by substituting Mace in its Room. But at the last Revival the Medicine was much more alter'd on Account of the exceptionable Flavour of some of the Ingredients; and it has been now thought proper to take this Composition still farther into Examination. The principal Part of the Medicine is the Aloes, and the Improvement under Consideration consists in chusing the other Ingredients of such Aromatics, that may at least correct the ill Smell, if not alleviate the intense Bitterness of this principal Ingredient. All the Ingredients which have made a Part of the Composition, either in our present, or former *Pharmacopœias*, have been found upon parti-

cular Examination to be insignificant, or to increase the Offensiveness of the Medicine, both in Flavour and Taste, except Cinnamon and Cardamom Seeds; and of these the Cinnamon is not free from Objection in regard to the Taste. After Trial made upon many other Materials both simple and compounded together, the simple Form of the Medicine here exhibited has appeared to exceed all others.

I should not apprehend it possible, by any Means whatever, to render this Medicine agreeable in any Degree to the Taste; and therefore the Improvements in this Medicine should be consider'd with Respect to the Medicinal Virtues only; and Experience alone must determine whether it is better or worse than the *Tinctura sacra* of former Dispensatories. But I should suspect that it is not better.

Tinctura Salutifera.

Healthful Tincture.

Take the Roots of Angelica, *Calamus Aromaticus*, Galangal, Gentian, and Zedoary, Bay Berries, the lesser Cardamoms, Cinnamon, and long Pepper, of each a Dram: To these Ingredients, ready slic'd and bruis'd, add a Quart of French Brandy; let them digest for three Days, and afterwards strain off the Tincture. E.

This seems intended for nothing more than a Cordial Dram, and is better Furniture for a Distiller's than an Apothecary's Shop.

Tinctura Serpentariae.

Tincture of Snake Root.

Take of Virginia Snake Root three Ounces, of Proof Spirit a Quart. Digest without Heat, and strain off the Spirit. L.

The Virtues of this may be understood from those of the Root. It is here directed to be made with Proof Spirit,

Spirit, as a better Menstruum for the Extraction of the Virtues of the Root, than one that is higher.

Tinctura Serpentariæ composita.

Compound Tincture of Snake Root.

Take of *Virginia* Snake Root, two Ounces; Venice Treacle, an Ounce; Cochineal a Dram; and *Spanish* white Wine, a Quart; let them stand to digest in a gentle Heat for four Days, then strain off the Tincture. E.

This is a high Cordial and Sudorific, but a very dangerous Medicine, if used without the greatest Judgment; for if it does not immediately do Service, it is sure to do a great deal of Prejudice, and to increase the Fever immediately, which it was intended to relieve.

Tinctura ad Stomachicos.

Stomachic Tincture.

Take the Roots of *Calamus Aromaticus*, Galangal, Gentian; and Zedoary, Orange Peel, and *Peruvian* Bark, of each two Ounces; the Tops of common Wormwood, and the lesser Centaury, Chamomile Flowers, and the Seeds of *Carduus Benedictus*, of each an Ounce; crude Filings of Iron, tied up in a Piece of Linen, six Ounces; when these Ingredients have, as they require, been sliced and bruised, pour upon them two Gallons of *French* white Wine, and digest for four Days, then strain off the Tincture. This Tincture may also be made without Iron.

This Preparation nearly resembles that given by Dr. *Cheyne*, which he recommends as proper to brace up the Solids, after a due Course of Evacuants and Attenuants. It is a very good Stomachic, and Strengtheners, and may very properly be used, after a Course of the Bark, in order to prevent the Return of an Inter-

mittent, in the Quantity of a few Spoonfuls for a Dose. I think Dr. *Cheyne* orders it to be taken an Hour before, and two Hours after Dinner.

Tinctura Stomachica.

Stomachic Tincture.

Take of stoned Raisins four Ounces, of Cinnamon half an Ounce, Caraway Seeds, the lesser Cardamoms freed from their Husks, Cochineal, of each two Drams, of Proof Spirit a Quart. Digest without Heat, and strain off the Spirit. L.

This is intended as a spicy Cordial, but should seem to be of very little Use in Practice.

Tinctura Styptica.

The Styptic Tincture.

Take of calcined green Vitriol one Dram, of *French* Brandy tinctured by the Cask a Quart. Mix them that the Spirit may turn black, and then strain it off. L.

The Compilers of the last *London* Dispensatory have substituted this, in the Room of the celebrated Styptic of *Helvetius*, and it is said to be a good Remedy for Hæmorrhages. *Helvetius's Styptic*, as publish'd by himself, is thus made:

Take four Pounds of the Filings of Steel, and eight Pounds of Tartar, well powder'd, mix these well together, and put them in a new earthen Pot, and pour thereon as much *French* Brandy as will make it into a Poultice. Let this stand fermenting in a Cellar for four Days, and stir it between whiles. Then put it into a *Balneum Mariæ*, and distil it according to Art, with a moderate Fire, to draw off the Brandy. When you find that nothing but the Phlegm comes off, take it from the Fire, and take out the Mass, stamp it very fine, that not the least Lump may remain; then mix it again, as before, with a suf-

sufficient Quantity of Brandy, and put it into the Cellar to ferment, as before, and then distil it a second time. This Operation may be reiterated seven or eight times, but the last Time mix your Mass well upon a Marble, and form it into two Ounce Balls. One of these Balls is steep'd in a Pint of good *French* Brandy, a little warmed, and hung only in it by a Wire, till the Brandy has received the Colour of the Ball. But if you are in great Haste, then grate a sufficient Quantity of the Ball in some Brandy, stir it well, and you may use it that very Instant.

This is said to be the same as the celebrated Styptic of Dr. *Eaton*.

Tinctura Salis Tartari.

Tincture of Salt of Tartar.

Take of the Salt of Tartar, one Pound; put it into a Crucible; place it in a melting Furnace; and let it ignite gradually, till it is of a white melting Heat; cover it well with Coals, and keep it in the most extreme Degree of Fire for five or six Hours: Then pour it into a warm Mortar, and, whilst warm, powder it, and put it into a Matrafs, heated upon warm Sand to prevent its Breaking with the hot Salt; then pour upon it of tartariz'd Spirit of Wine, two Pints, invert and lute well to it another Matrafs, to make it a double Vessel; make a gentle Fire, and let it simmer six or seven Hours, and in that Time it will acquire a good Tincture; which when cold, put into a Vial, and keep it well stop'd.

This operates both by Sweat and Urine, and is an excellent Aperitive, and good in all scorbutic Habits, and in Cachexies, Jaundice, and Drop-sies. Its Dose is from ten to fifty or sixty Drops.

Tinctura Salis Tartari Harveiana.

Harvey's Tincture of Salt of Tartar.

Take the black alkaline Salt, remaining in the Retort, after the strongest Distillation of Tartar; reduce it to Powder, in a hot Iron Mortar; with a hot Pestle, and immediately put it into a tall Bolt-head; pour the best common Spirit thereon, so as to rise four Inches above it; boil with a gentle Fire, for twenty Hours; and thus a black, thin, bitter, aromatic, lixivious Liquor will be obtained, which, being decanted pure, may long be preserv'd perfect in a close Glass for Use.

The common Spirit, consisting of Water, Acid, and Alcohol united, coming to boil with the Alkali of Tartar, that still remains oily, makes a mild and safe Lixivium; the Alkali being here temper'd by the Acid, Oil and Alcohol: Whence we have a noble Kind of Medicine and Menstruum, wherein if Vegetables be boiled or digested, it dissolves them to good Advantage. In Surgery, it is an excellent Remedy for cleansing, deterging, drying, and healing all weeping, purulent, putrid, sanious, and virulent Ulcers, as well the fistulous as the sinuous and burrowing; and also for taking down proud Flesh, especially if artificially mixed with a little Oil. It has similar Effects when used internally, in Distempers where acid, austere, aqueous, mucous, or terrestrial Matters, and Coagulations abound, provided they be not attended with a putrid Dissolution of the Humours; and hence it is commended in old Obstructions of the *Viscera*, Collections of Water, dropical Dispositions, the Green Sickness, Jaundice, and cold Gout. It acts strongly as a Diuretic, a Diaphoretic, and sometimes as a Purgative; and may be safely given in a large Dose. Two or three Drams there-

thereof being mollified with an Ounce of the Syrup of the five opening Roots, and diluted with Fennel Water, will have a very good Effect, being taken in the Morning fasting, and repeated three or four times at due Intervals, or a better than most other Remedies. Hence the famous Dr. *Harvey* deservedly recommends it.

Tinctura Succini.

Tincture of Amber.

Take two Ounces of the Powder of yellow Amber, and as much Oil of Tartar *per Deliquium*, as will make it into a Paste; on which, when gently dry'd, pour twenty Ounces of rectify'd Spirits of Wine: Digest in a gentle Heat for eight Days, and afterwards filtre the Tincture. E.

Tinctura Succini Hoffmanni.

Hoffman's Tincture of Amber.

Mix very exactly Salt of Tartar, with an equal Portion of choice Amber, reduc'd to a very fine Powder, and pour thereon a sufficient Quantity of Spirit, to the Height of about four Inches above it. After a previous Digestion, let a Distillation be made out of a Glass Cucurbit, with a Sand Heat; and there will be drawn off a Spirit impregnated with the most subtle and fragrant Oil of Amber, which, though it be in itself endued with an extraordinary strengthening Virtue, will yet serve to much better Purposes, by contributing towards furnishing us with an excellent Tincture. The transparent Amber is to be chosen before that which is brown, or dark colour'd, as consisting of a softer sulphureous Matter. Let this be bruised and levigated in a Mortar to a very fine Powder; into which, being placed on a Marble Stone, drop Oil of Tartar *per*

Deliquium, and mix them very carefully till they come to a Paste, which must be dry'd gently. This done, pour thereon a sufficient Quantity of the Spirit prepared as above, and then digest them in a Glass Vessel, or Vial close stopp'd with a gentle Heat.

By this means we obtain the most generous and efficacious Essence of Amber; a Remedy highly to be valu'd, were it only on Account of its most grateful Taste and Smell.

The most convenient Way of taking it is by intilling some Drops of it into Sugar, or Syrup of Pinks, or of the acid Juice of Citrons. The Morning is the usual Time when Persons take it, for corroborating the Stomach, Head, and a weak, nervous System, drinking afterwards some Cups of warm Liquor, as Coffee or Chocolate; it may also be taken at Dinner in sweet Wine. It provokes the Menstrues, but restrains the *Fluor Albus*, and is an excellent Medicine in Rheumatic Disorders.

It is remarkable, that this Essence, dropp'd into Water, is not precipitated like other Essences or Solutions of Oils and Resins; and that a few Drops of it, intill'd into a large Quantity of Water, impregnate the whole with the grateful Odour of Amber, which so amply diffuses itself through the least Corpuscles of Water, is of very fine Parts, and by Consequence can make its way into the very innermost Fluids and Solids of our Bodies; so that a small Dose may be expected to produce a considerable Effect.

Tincture of Amber has an incredible Efficacy in all those Distempers, which proceed from too great a Mobility of the immediate Instruments of the human Affections, Spirits, and nervous System, and particularly from a Relaxation of the Parts thro' Weakness. And hence

it proves of wonderful Service in hypochondriacal, hysterical, languid, cold, watery Cases, and Concretions often proceeding from them. So that Mr. Boyle and Helmont have for this Reason placed it among the noblest Anti-spasmodics, and Anti-epileptics, when the Disorder proceeds from those Causes. The Dose is from ten to eighty Drops, three times a Day, in *Spanish* or *Canary* Wine.

Tinctura Sudorifica.

The Sudorific Tincture.

Take of *Virginian* Snake Root, five Drams; *Cochineal*, half an Ounce; *Russian* Castor, one Dram; *English* Saffron, two Scruples; Opium one Scruple; *Mindererus's* Spirit, a Pint. Digest for three Days in a Sand Heat, and strain. E.

This, as its Name imports, is a powerful Sudorific, but a very dangerous Medicine in Fevers. *Sydenham's* Method of treating Fevers is used like Probity, *laudatur & alget*, prais'd, but seldom practis'd; whilst that of *Morton*, which consists in the Exhibition of fiery Sudorifics, is prefer'd to it, tho' the Theory on which it was founded has been long exploded. I have frequently known a Cold, or very slight Fever, exalted into one very dangerous and fatal by the Use of such Medicines. But I don't recollect a single Instance of a Fever cured by hot Sudorifics, which I had not Reason to believe would have terminated spontaneously without them. And I am very certain, that the Custom so prevalent among the Unwary, of exhibiting Sudorifics, or Sweats, as they are call'd, in the Beginning of Fevers, causes more Gain to the Practisers of Physic, than half the Distempers which would otherwise afflict Mankind. The Use of this Medicine, therefore, and others of the like Intentions, requires the utmost Judg-

ment and Caution, and, even with these, are seldom of any great Service to the Patient, whatever they may be to the Prescriber, or Dispenser.

Tinctura Tolutana.

Tincture of Balsam of *Tolu*.

Take of the Balsam of *Tolu* an Ounce and half, rectify'd Spirit, a Pint. Digest in a Sand Heat till the Balsam is dissolv'd, and strain.

The Virtues of this may be learn'd from those of Balsam of *Tolu*, and what has been said of Balsamics. Book IV. Chap. vi.

Tinctura Valeriana simplex.

The simple Tincture of Valerian.

Take of wild Valerian Root four Ounces, of Proof Spirit a Quart. After Digestion strain off the Spirit. L.

The Valerian here is to be finely powder'd, upon which depends the Strength of the Tincture, which is said to be a neat and elegant Medicine, and no doubt of considerable Efficacy. But as no Inconvenience attends the taking the Root, I don't see what curative End can be answer'd by this Tincture; for the Spirit by no Means adds any Virtue to the Valerian.

Tinctura Valerianæ volatilis.

Volatile Tincture of Valerian.

Take of the Root of wild Valerian four Ounces, of the volatile aromatic Spirit a Quart. Digest them together in a close Vessel without Heat, and then strain the Tincture off. L.

This should seem to be a very good Medicine in those Cases which are usually call'd nervous, and particularly in relax'd Constitutions, that abound with an Acid.

Tinctura Veratri.

Tincture of white Hellebore.

Take of the Root of white Hellebore eight Ounces, of Proof Spirit a Quart. After Digestion filter thro' Paper. L.

I think this is the first Time we have had a Tincture of white Hellebore in our Dispensatory. It is an excellent Medicine to quicken Purges, when we intend they should operate briskly, and with Efficacy, as in Maniacal Cases, or Apoplexies, when a strong Stimulus is requir'd. In the last Case *Celsus* recommends the Use of white Hellebore.

Elixir Paregoricum.

The Paregoric Elixir.

Take Flowers of Benjamin, Opium strained, of each a Dram, of Camphire, two Scruples, of the essential Oil of Anniseeds half a Dram, of rectified Spirit of Wine a Quart. After Digestion strain off the Spirit. L.

This is much the same as the *Elixir Asthmaticum*, in the London Dispensatory. And here the Name is alter'd for some Purpose; for the Epithet *Asthmaticum* would be subject to make the Unattentive consider the Medicine as only proper in Asthmatic Cases; whereas 'tis on all Occasions an excellent Paregoric. *Quincy* says there is not any Composition of our Shops to be compared to it in the Intention it is ordered. It admirably allays the Tickling which provokes frequent Coughing, and yet opens the Breast, and gives more Liberty of Breathing; so farasmuch as the Opium takes off the uneasy Sensation occasion'd by acrimonious Humours, and so tends to thicken them, by occasioning them to be less agitated in Coughing; The Benjamin and all the other Ingredients serve to deterge and cleanse the small Glands, and

make Way for their Discharges. In this Composition also it is so manag'd, that the Opium is rather an Opener, by relaxing the Fibres, and thereby enlarging the Capacities of the Vessel; in which consists the Cure of an Asthma; because thereby the Blood flows easier through the Lungs, and they have more Room to respire in: Whereas in those Compositions where Opium is not join'd with warm Detergents, but rather with Things which agglutinate, as in the Storax Pill, such Humours are suffer'd to lodge till they thicken and fill the Vessels with Grumies and Viscidities, and so increase all the Symptoms, as sometimes to stop all Motion, and end in Death. The Truce therefore which Opium gives in this Medicine, is only to procure the better Opportunity to the other Ingredients to rarify and thin the viscid Cohesions in the Vessels, and fit them for Circulation and Secretion: So that as stopping a Cough, in some Cases and by some Means, is of fatal Consequence, by this Management it is a good Step towards a Cure of what causes one. Its Dose is from twenty to one hundred Drops to grown Persons, in Hyssop Water or Canary, at Night going to Bed; and from five to twenty Drops to Children: For whom, in what is called the Chin Cough, it is peculiarly excellent.

Elixir Proprietatis, with distill'd Vinnegar.

Take choice Aloes, Saffron and Myrrh, of each half an Ounce; cut and bruise them, put them into a tall Bolt Head, pour twenty times their own Weight of the strongest distill'd Vinegar thereon, let them simmer together for twelve Hours: Then suffer the whole to rest, that the Faeces may subside, and gently strain off the pure Liquor thro' a thin Linnen. Put half the Quantity of distilled Vinegar to the Remainder,

mainder, boil, and proceed as before, and throw away the Fæces. Mix the two Tinctures together, and distil with a gentle Fire, till the whole is thicken'd to a third; keep the Vinegar that comes over for the same Use; and what remains behind is the *Elixir Proprietatis* with distill'd Vinegar.

Thus we obtain an acid, aromatic Medicine of great Use in the Practice of Physic: for when externally apply'd, it cleanses and heals putrid, sinuous, and fistulous old Ulcers, defends the Parts from Putrefaction, and preserves them by a true embalming Virtue: It also heals Ulcers, and cures Gangrenes in the Lips, Tongue, Palate, and Jaws. It has the same Effects in the first Passages, when used internally, as often as putrefy'd Matter, corrupted Bile, concremented Phlegm, Worms, and numberless Distempers proceeding from these four Causes, are lodg'd or seated therein. Again, it has nearly the same Effects in the Blood and Viscera, as may easily appear from knowing the Virtues of the three Ingredients, when dissolv'd in a subtil Vinegar. It is to be taken in a Morning upon an empty Stomach, at least twelve Hours after eating: It is given from a Dram to two or three for a Dose, in sweet Wine, Méad, or the like; walking after it, or having the Belly gently rubb'd. If taken in a larger Dose, and with a somewhat cooler Regimen, it always purges: if in a less Dose, and often repeated, it cleanses the Blood by secreting thick Urine, and generally performs both these Operations successfully. But, if taken plentifully, while the Patient is in Bed, and the Body well cover'd, it acts as an excellent Sudorific; and afterwards usually purges, and proves diuretic, and thus becomes every

way useful: Whence it is the best acid *Elixir Proprietatis*, good in numerous Cases, and at the same time safe. *Paracelsus* declared, that an Elixir made of Aloes, Saffron, and Myrrh, would prove a vivifying and preserving Balsam, able to continue Health and long Life to the utmost possible Limits; and hence he calls it by a lofty Title the *Elixir of Propriety* to Man; but concealed the Preparation, in which *Helmont* asserts the *Alcabest* is requir'd. *Crollius* formerly used the Oil of Sulphur made by the Bell, as a Menstruum in this Case, upon considering, according to the Doctrine of *Paracelsus*, that an hungry Acid was proper in Stomachic Remedies; but when this is used, the Aloes and Myrrh are scorched, and acquire a stony Hardness, so as not afterwards readily to dissolve in Alcohol: For this Use they require that the strong Acid of the Sulphur should be diluted. Hence, says *Boerhaave*, I conjectur'd, that a mild, oily, vegetable Acid would prove a commodious and proper Solvent in this Case for Medicinal Uses; and, upon adding an equal Quantity of Alcohol to the Elixir prepared in this Manner, it becomes more balsamic, mild, and effectual. It in every Respect resembles the *Pilula Rusi*, and may be successfully used in their Stead. This is the Character given by *Boerhaave* of his *Elixir Proprietatis* with Vinegar; but many other Methods have been taken of making this celebrated and excellent Medicine, tho' the Ingredients in all are Myrrh, Aloes, and Saffron; so that the Difference results principally from the Menstruum. Some direct it to be made with Alcohol, others with Wine, and again others with the Addition of an Acid. *Boerhaave* also directs an *Elixir Proprietatis* to be made by digesting the Myrrh, Aloes, and Saffron in three times

their Weight of the Liquor of tartariz'd Tartar, in a close Vessel, for three Days, in order to dissolve the Ingredients, then adding twenty times their Weight of *Alcohol*, and suffering them to boil gently for twelve Hours; then decanting off the clear Liquor, more Alcohol is to be added, and this is to be repeated till almost the whole Ingredients are taken up. Then all the Liquors are to be mixed, and inspissated to the Thickness of Oil. This Elixir, he informs us, being prepared with an extremely opening Salt, is possess'd of many excellent Virtues, so that it is admirable in old inveterate Obstructions, which it powerfully resolves, without offending by any acid or alkaline Property: For these compound Salts, along with what they dissolve, generally pass quick through the Vessels of the Body.

The same Author farther directs an *Elixir Proprietatis* to be prepar'd in much the same Manner, only using the Liquor of Regenerated Tartar, instead of the Liquor of Tartariz'd Tartar. And by this Means he tells us, the Ingredients are almost wholly dissolv'd, so as to become uniform and potable; whence he asserts, that he has found this Elixir to have an incomparable opening, and dissolving Virtue in most Chronical Diseases, where it mightily liquefies the Concretions in the Vessels, agreeably stimulates the nervous System, so as to throw off the Matters thus dissolved, and prevents Putrefaction, which in these Cases is so frequent and destructive. Hence it relieves the Viscera, restores their Actions impaired by an obstructing Matter, resolves the Humours, and thus cures numerous Distempers, scarce otherwise curable.

All these Elixirs differ in Virtues, according to the Difference of the Menstruum used, and ought to be ready prepar'd with different Men-

struums for different Purposes. They all of them preserve the Bodies of Animals from Putrefaction, if suspended therein, except that prepared with Water. They are all of them excellent in case of carious Bones, except those prepared with Acids; and hence they should always be ready at hand for Practice, as being almost general Medicines: And no Wonder, since Saffron is a true Exciter of the Animal Spirits; Aloes an excellent and innocent Purgative; and Myrrh the highest Preservative: But in those Distempers where the Blood is too much broke, in large Bleedings, or the Hæmorrhoids, or where the Humours are in too violent a Motion, they are by no means proper, but hurtful.

The *Edinburgh Dispensatory* directs this Medicine thus.

Elixir Proprietatis.

Elixir of Propriety.

Take one Ounce of pulveriz'd Myrrh, and as much Oil of Tartar *per Deliquium*, as will make it into a soft Paste; with a gentle Heat evaporate the Moisture, and add of rectify'd Spirit two Pints, digest in a Sand Heat for four Days, then add of Succotrine Aloes in Powder, an Ounce and half; *English* Saffron, an Ounce; digest again for two Days, and pour off the Elixir, after it is depurated by subsiding.

In the same Dispensatory it is directed to be prepar'd with an Acid thus,

Elixir Proprietatis cum Acido.

Elixir of Propriety with an Acid.

Take of Myrrh in Powder an Ounce and half; Succotrine Aloes in Powder, an Ounce; *English* Saffron, half an Ounce; rectify'd Spirit, twenty four Ounces, that is, a Pint and half; dulcify'd Spirit of Vitriol, six Ounces. Digest in a Sand

Sand Heat for four Days, and pour off the Elixir, after it is depurated by subsiding.

In the *London Dispensatory*, the original Name of this Medicine is chang'd; to which I have the same Objection as I have to other Alterations of this Kind, which is, that it causes Confusion without rendering the Medicine the better, and without any one Advantage resulting either to the Prescriber, Compounder, or Patient. The simple *Elixir Proprietatis* is order'd under the Title of

Elixir Aloes.

Elixir of Aloes.

Take of the Tincture of Myrrh a Quart, Saffron, Succotrine Aloes, of each three Ounces in Weight, after Digestion strain off the Spirit. L.

In Imitation of *Helmont's Elixir Proprietatis*, we have the

Vinum Aloeticum Alkalinum.

Aloetic Alkaline Wine.

Take of fixt Alkaline Salt eight Ounces, Succotrine Aloes, Saffron, Myrrh, of each one Ounce, of purify'd Sal Ammoniac six Drams, of white Wine a Quart. Infuse them together without Heat for a Week or longer, then filtre the Wine thro' Paper. L.

Elixir Myrrhæ compositum.

The compound Elixir of Myrrh.

Take of the Extract of Savine one Ounce, of the Tincture of Castor a Pint, of the Tincture of Myrrh half a Pint. After Digestion strain off the Tincture. L.

This seems to be an excellent Medicine to promote the Uterine Discharges, and should seem to be very forcing, for which Reason it should never be given when there is any

Suspicion of Pregnancy. It may also promote the Expulsion of the Fœtus and Secundines, but with this View it must be exhibited with Caution, for Fear it should bring on a Flooding. It is farther said to be a good Antihysterick, and to cure Fits in Children. But for this last Purpose there are much better Medicines.

Elixir Pectorale.

Pectoral Elixir.

Take Balsam of Tolu two Ounces, Gum Benjamin an Ounce and half, *English* Saffron, half an Ounce, rectify'd Spirit of Wine a Quart, digest them in a Sand Heat for eight Days, and then filtre the Tincture.

The Title of this Medicine expresses its Virtues; it should seem to be an admirable Balsamic and Pectoral.

Elixir Polychrestum.

Elixir of many Virtues.

Take of Gum Guaiacum six Ounces, *Peruvian* Balsam, half an Ounce; rectify'd Spirit of Wine, a Quart; digest them in *Balneo Mariæ* for four Days, and strain. E.

The *London Dispensatory* directs this, under the Title of *Balsamum Guaiacinum*, Balsam of Guaiacum, to be made by digesting in two Pints and a half of rectify'd Spirit, a Pound of Gum Guaiacum, and three Ounces of Balsam of Peru.

Both this, and that directed by the *Edinburgh Dispensatory* above, differ very little from the celebrated *Balsamum Polychrestum* which *Quincy* introduces with this remarkable Character: It is, says he, an efficacious Medicine for many good Purposes, but particularly to warm and defend the Nerves from those Defluxions which prejudice their Motions, and, when they prove of a saline tartarous

rous Kind, make the Gout in the Joints; to preserve against this last Distemper, there is not a better Medicine, considering the Conveniences of making and taking it. It will likewise answer all the Ends that are aim'd at by the Wood Diet-drinks; it dries up or dissipates by insensible Transpiration all superfluous Moistures, is good in all Venereal and Scrophulous Cases, and very certainly wears off an old Gleet, where the Virulence has been previously removed. It will change an aqueous Vehicle milky, but may conveniently enough be given in any Liquor; and it is usually taken from twenty to thirty Drops, two or three times in a Day. Thus Quincy. But I have been so unfortunate as to be greatly disappointed in my Expectations from this Medicine, having very seldom known it succeed in the Manner he promises. But it will answer very good Purposes when mix'd and taken with *Elixir Proprietatis*, in small Doses, as an Alterative.

Elixir Salutis.

Elixir of Health.

Take of Senna Leaves, cleared of their Stalks, four Ounces; of Guaiacum Shavings, of dry'd E-lecampane Root, of the Seeds of Anise, Caraway, Coriander, and of Liquorice Root, of each two Ounces; of Raisins stoned, eight Ounces; of French Brandy three Quarts; steep them together cold for four Days, and then strain out the Tincture for Use.

Some add Rhubarb, Scammony, Jalap, or other purgative Ingredients, in order to make it operate more briskly; for, as here directed, the purgative Ingredient, which is the Senna only, bears so small a Proportion to the Quantity of Spirit in a Dose sufficient for a Purge, that it is too strong for most Persons who

have not been accustomed to spirituous Liquors; it is therefore to be deem'd rather a Carminative than a Cathartic, and in some Colic Pains it gives great Relief. Something very like this is the celebrated *Daffy's Elixir*, by which an immense Sum of Money has been got by the Dealers in it. What has contributed to the Success of this Medicine is, the Propensity of great Numbers to Drams, which immediately afford some Relief in Lowness and Flatulences, whatever bad Effects they may afterwards have; and it must be confess'd, that the Cathartic Ingredients render it less prejudicial, than it would be without them. It may be consider'd as a purgative Ufquebaugh. It is a proper Purge for Drunkards, and is a great Favourite of old Women habituated to Drams. But can answer no good End but what may be much better provided for by Means less pernicious. It is directed in the *London Dispensatory* thus, under the Name of

Tinctura Senæ.

Tincture of Sena.

Take of stoned Raisins sixteen Ounces, of the Leaves of Sena one Pound, of Caraway Seeds an Ounce and a half, of Cardamom Seeds husk'd half an Ounce, of Proof Spirit a Gallon. Digest without Heat, and strain off the Spirit. L.

This is much stronger of the Sena than that of the last Dispensatory, and, consequently a better Purge.

The *Edinburgh Dispensatory* directs it thus, under the Title of

Elixir Salutis.

Elixir of Health.

Take of the Leaves of Sena, two Ounces; choice Rhubarb, Seeds of Fennel, Juniper Berries, Raspings

ings of Guaiacum, each an Ounce; French Brandy three Pints: Digest for four Days, and to the strain'd Liquor add, white Sugar-Candy in Powder four Ounces. E.

Elixir Stomachium.

Stomachic Elixir.

Take of Gentian Root, and the fresh yellow Rind of Oranges, each two Ounces; Cochineal half a Dram; slice and bruise the Ingredients, pour thereon a Quart of French Brandy, let them digest for three Days, then strain off the Elixir. E.

This seems intended to imitate Stoughton's Elixir, and may be very proper for the Bar of a Tavern, where Profit only is consider'd. But, in the salutary Art of Physic, Distempers may be cur'd without laying in the Patient's Way Temptations to do himself a Mischief, or leading him into a Habit, that will infallibly destroy him, if persisted in, that is, of whetting in a Morning. Aqueous Bitters answer much better Purposes, than those which are spirituous.

Elixir Vitrioli.

Elixir of Vitriol.

Take of dulcify'd Spirit of Vitriol, two Pounds; insil gradually into it, of the Chymical Oil of Mint, half an Ounce; that of Lemons and Nutmegs, each two Drams; mix. E.

Elixir Vitrioli Mynsichti.

Mynsicht's Elixir of Vitriol.

Take of Cinnamon, Ginger, and Cloves, of each three Drams; Calamus Aromaticus, one Ounce; Galangal an Ounce and an half; Sage and Mint dried, of each half an Ounce; Cubebs and Nutmegs, of each two Drams; Wood of Aloes, Citron Peels, of each a

Dram: Powder them together, and add to them white Sugar-Candy, three Ounces; Spirit of Wine, a Pound and half; and Oil of Vitriol a Pound: Digest them together for twenty Days; and then pour off the Liquor, and filtre it for Use.

Quincy says, the Spirit had better be digested upon the Ingredients some time by itself; because the Oil of Vitriol gives a Thickness to it, and disables it from taking out the Virtues of the Spices; and when it is put in, it must be done very gradually, because it will else cause so sudden a Heat, as to endanger bursting the Vessel. Many have got a Way of putting in Jamaica Pepper for all the Spices; but it is not so just to vary from the *Recipe*, when there is no Reason for it but Cheapness, and the Medicine thereby becomes the worse; which it certainly does in this Instance, because that is a more oily Spice than those here order'd, and therefore cannot make so good a Stomachic. The same Author also informs us, that this is deservedly a very good Medicine, for it mightily strengthens the Stomach, and will do good Service sometimes, where Bitters avail nothing, especially in Relaxations from Debauches and Over-feeding. This very well imitates the Virtues of the celebrated Bark, and is properly given in all Intentions where that is found to succeed; so that by its Help Intermittents, and many Disorders from too lax a State of the Solids, may be removed with a much less Quantity of the Bark than they might otherwise require. It has an Influence also over many Distempers of the Head to Advantage, and preserves against Epilepsies, Apoplexies, Palsies, and Rheumy Defluxions. It may be given from ten to thirty or forty Drops in any suitable Vehicle,

once,

once, twice, or thrice a Day; observing to take it when the Stomach is most empty, as in the Morning fasting, a little before Dinner, and in the Afternoon. This is the very Medicine which Mr. Fuller, Author of the *Medicina Gymnastica*, gives an Account of in his *Appendix*, to have been order'd to him by a Physician now of the greatest Note, and by the sole Help of which he was recover'd from a most deplorable Decay of Constitution, particularly of the Stomach, and continual Reachings to vomit for some time; though from a Return afterwards into the same Irregularities, which was driving away the *Hippo* by spirituous Liquors, he relapsed and died. *Bates* recommends this as an excellent Medicine for the Stomach and Intestines, for exciting the Appetite, and preserving from the Epilepsy and Apoplexy; for purging the Brain, for relieving the Head, together with the whole Body, from phlegmatic catarrhus Humours, and defending it from Pain.

Elixir Vitrioli acidum.

Acid Elixir of Vitriol.

Take of the aromatic Tincture a Pint, of the strong Spirit or Oil of Vitriol, the Weight of four Ounces. Mix them gradually, and when the Fæces are subsided, filtre thro' Paper. L.

This is the Method directed by the College for making *Mynsicht's* Elixir of Vitriol. Experience must determine, whether the Medicine is improv'd with Respect to its Efficacy, the principal thing to be consider'd.

Elixir Vitrioli dulce.

Dulcify'd Elixir of Vitriol.

Take of the aromatic Tincture a Pint, of dulcify'd Spirit of Vitriol eight Ounces in Weight. Mix them, L.

The *London Dispensatory* orders *Vigani's* Elixir of Vitriol to be thus made. It is intended for Stomachs which cannot bear the Acidity of the other.

The Author of the *Pharmacopœia Reformata* informs us, that what has been sold for *Vigani's* Elixir of Vitriol, is no more than the sweet Spirit of Vitriol, digested upon a small Quantity of Mint, curiously dry'd, until it has acquired a due Colour. Great Care must be taken that the Spirit be well freed from its acid Parts, either by a very prudent Rectification, or by leisurely distilling it from a small Quantity of fixed Alkaline Salt, for on this Circumstance depends its greenish Colour, in which consists the Secret, that alone being the Characteristic of the Genuineness of the Preparation. The Mint for this Purpose is most commodiously suspended in the Spirit in a fine Linen Cloth, to prevent the Necessity of filtering it, during which, its most volatile Parts will exhale.

Vinum Amarum.

Bitter Wine.

Take Gentian Root, the yellow Part of fresh Lemon Peel, of each one Ounce, of long Pepper two Drams, of white Wine, a Quart. Infuse without Heat, and strain. L.

This is intended as a Stomachic.

Vinum Antimoniale.

Antimonial Wine.

Take of the Crocus of Antimony washed, one Ounce, of white Wine one Pint and a half. Infuse without Heat, and then strain the Wine off thro' Paper. L.

It is something very astonishing that the Crocus of Antimony, or *Crocus Metallorum*, should communicate inexhaustibly an Emetic Quality to the Liquor it is infus'd in, which it is found to do. The Compilers of the

the *London Dispensatory* have alter'd the Name *Vinum Benedictum* which it was formerly known by, to *Vinum Antimoniale*, as it should seem without any Necessity. In the former College Dispensatory it was directed to be made by infusing an Ounce of the *Crocus Metallorum* in a Pint and a half of *Canary*, for several Days. *Quincy* says, the Dose is from two Drams to an Ounce. This was the common Emetic before *Ipecacuanha* was introduc'd, and was that generally made use of by *Sydenham*, who I presume observ'd no ill Effects from its Use, because if he had, he would not have prescrib'd it; and I never knew it do any Injury, where judiciously administer'd; and with Respect to its Virtues I have strong Reason to believe it much more effectual than *Ipecacuanha*; in particular I have never observ'd the good Effects from *Ipecacuanha*, given in the Beginning of the Small Pox, which the honest *Sydenham* ascribes to the Emetic Wine.

Vinum Chalybeatum.

Chalybeate Wine.

Take of Filings of Steel unprepar'd, three Ounces, Cochineal, half a Dram; *Rhenish* Wine, a Quart; digest in a Sand Heat for ten Days, and filtre. *E.*

This is much the same as *Boerhaave's* Chalybeate Wine, and scarcely differs, except in the Difference of Cochineal, an Ingredient of no Importance to the Virtues of the Medicine; but he only orders the Digestion to be continued three or four Days. *Boerhaave* says, that the soluble Part of Iron, is a most noble Medicine, for promoting that Power in the Body by which the Blood is made, as often as it happens to be weaken'd, thro' a bare Debility of the over relax'd Solids, and an indolent, cold, aqueous Indisposition

of the Juices. If an excellent Medicinal Virtue may, by any Experiment, be gained from Metals, certainly it is this; for no Virtue of any Vegetable or Animal Substance, no Diet, nor Regimen, can effect that in this Case, which is effected by Iron: But it proves hurtful where the vital Powers are too strong, whether this proceeds from the Fluids or Solids. I have often thought, says *Boerhaave*, whether this was not the potable Sulphur of the Metal, that so powerfully resists the Debility of Nature; a Medicine infinitely superior to the boasted *Aurum Potabile*, and a Medicine that never proves pernicious when given where required. Hence we see that Iron has a Part not very remote from a Vegetable, and even an Animal Nature; and which is extremely easy to dissolve. If a Dram of this Chalybeate Wine be mixed with thrice its Weight of Sugar, boiled to a proper Consistence, and be prudently given in the proper Cases, it makes an incomparable Remedy for the Young of both Sexes.

Vinum Chalybeatum.

Chalybeate Wine.

Take of Filings of Iron four Ounces, Cinnamon and Mace, of each half an Ounce, of *Rhenish* Wine two Quarts. Infuse a Month without Heat, often stirring, then strain it off. *L.*

This differs but little from the preceding, except in the Addition of the Spices.

Vinum Croceum.

Saffron Wine.

Take of Saffron one Ounce, of *Canary* one Pint. Infuse without Heat, and strain. *L.*

The Virtues of this may be learn'd from those of Saffron.

Vinum Millepedatum,

Wine of Millepedes.

Take of live Millepedes, two Ounces ; bruise them a little, and pour thereon a Pint of white *Rhenish* Wine ; let them infuse for a Night, and afterwards press out the Wine. E.

The Medicinal Virtues of this may be understood by those of the Millepedes.

Vinum Viperinum.

Viper Wine.

Take of dried Vipers two Ounces, of white Wine three Pints. Infuse with a gentle Heat for a Week, and then strain the Wine off. L.

There has been some Dispute whether living or dry'd Vipers are best for Viper Wine, or whether a cold or a hot Infusion is preferable. The College has here preferr'd dry'd Vipers, and a warm Infusion; but the Medicine is not of Consequence enough to be worth disputing about, for I believe the Virtues it is possess'd of are very inconsiderable. A Medicine has been advertis'd in Town, under the Name of Viper Wine, which is said to have had very extraordinary Effects, such as might be expected from a Tincture of *Cantharides*, which upon Examination I find it really to be.

Spiritus Vini camphoratus.

Spirit of Wine, with Camphire.

Take of Camphire, an Ounce ; and rectify'd Spirit of Wine, a Pint ; mix them so as to make a Solution. E.

*Julaps, Mixtures, &c.**Julepum e Camphora.*

The Camphorated Julep.

Take of Camphire one Dram, of

double refin'd Sugar half an Ounce, of boiling Water a Pint. First, grind the Camphire with a little rectify'd Spirit of Wine, till it is softened, then with the Sugar till it is perfectly united; lastly add the Water by Degrees, and when the Mixture has stood in a cover'd Vessel till it is cold, strain it off. L.

This is substituted by the College for the *Julapium Camphoratum*, or Camphorated Julep, which is thus prepar'd,

Take Camphire, two Drams, set it on Fire, and extinguish it in a Pint of Water ; then light it again, and extinguish it, which repeat till all the Camphire is consum'd.

This is an admirable. Antihysterie, and is excellent in Case of Flatulencies. I don't know whether the Burning of the Camphire may not make it a better Medicine. For I have seen better Effects from this, than from any simple Solutions of Camphire.

Julepum e Creta.

The Chalk Julep.

Take of the whitest Chalk prepared, one Ounce, of double refin'd Sugar six Drams, of Gum Arabic two Drams, of Water a Quart. Mix all together. L.

This is an Absorbent, and seems intended for the Heart Burn, or Gripes in Children.

Julepum e Moscho.

The Musk Julep.

Take of Damask Rose Water the Measure of six Ounces, of Musk twelve Grains, of double refined Sugar one Dram. Grind the Musk and Sugar together, and gradually add the Rose Water. L.

The Musk in this Medicine is the only Ingredient to be depended upon, and

and this is given with much greater Effect in Subſtance. *Bates* has a Medicine not unlike this, under the Title of *Julapium Hyſtericum Moſchatum*, with Orange Flower Water, which is a better Vehicle than Roſe Water, and Dragon's Blood. This he orders to be taken at two Doſes in Hyſteric Fits. And *Fuller* has a *Julapium Moſchatum*, which he recommends very much as a Cordial, and ſays it is excellent in a Hiccough attending a Fever; and indeed Muſk is in this laſt Caſe very excellent, if given in Subſtance from ten to thirty Grains.

Lac Ammoniaci.

Milk of Gum Ammoniac.

Take of Gum Ammoniac two Drams, of ſimple Penny Royal Water half a Pint. Rub the Gum in a Mortar with the Water, till it is diſſolved. L.

This is the common Method of diſſolving *Gum Ammoniacum*, but it is ſo ſoon and readily done *extempore*, that it ſhould not ſeem neceſſary to make it an official Medicine. The Virtues may be learn'd from thoſe of Gum Ammoniac in the *Materia Medica*.

Of Decoctions, Infuſions, &c.

What are uſually called Infuſions in the Shops, are made by pouring boiling Water, or Water very near boiling, to the Ingredients to be infuſ'd: If theſe contain any volatile aromatic Parts, which it is neceſſary to retain in the Medicine, the Veſſel muſt be immediately accurately cover'd, which Circumſtance is otherwiſe not ſo neceſſary. If the Ingredients are boiled in the Water, the Medicine hence reſulting is called a Decoction, or Apozem. In Decoction the denſer the Plant is, and the more reſinous, the more oily Froth is thrown to its Surface;

and the leſs of that reſinous, or oleaginous Virtue is communicated to the Water, becauſe it is not diſſolved therein; and therefore for preparing a Decoction of this Kind, a long previous Diſſection, or the Addition of a fixed Alcaline Salt, and afterwards a longer Boiling, are required. But even in ſuch reſinous Vegetables, if boiled when they are freſh, green, and ſucculent, their native ſaponaceous Virtue ſtill keeps their Reſin ſoluble, which, running together when dry, becomes more difficult of Solution. This has been obſerved by thoſe, who, in *America*, have boiled the Chips of *Guaiacum* in Water, whereby they ſoon obtained a very penetrating Liquor which cures the Venereal Diſeaſe; while the Wood that has been long kept, being now leſs ſoluble in Water, has a leſs Effect. And as Plants loſe by Boiling all that which goes off in the Form of Vapour, with two hundred and twelve Degrees of Heat; all thoſe Plants are unfit for this Operation, whoſe Virtue required is volatile with this Degree of Heat. But thoſe whoſe Virtue reſides in a more fixed Matter than can be ſeparated by this Heat, are fit for Decoction. Let it, however, be carefully obſerved, that the peculiar Virtue of a Plant, which commonly reſides in its preſiding Spirit, does not always ſhew itſelf by ſome remarkable Odour, Fragrance, or aromatic Taſte: On the contrary it may happen, that the Spirit ſhall be extremely active, without remarkably affecting the Senſes; as appears in the black Hellebore Root, the *Cicuta aquatica Gefneri*, the *Solanum maniacum*, &c. whence all theſe Particulars are very cautiously to be conſider'd, before any general Rule is laid down.

Theſe Preparations may paſs thro' the Laſteal and Meſenteric Veſſels, and mix with the venous Blood of the

the *Vena Cava*, and thus by the vital Motion be mixed with the Humours of the Body, received into all the larger Kinds of Vessels, reach to the Viscera, and all the other Parts of the Body; for they are saponaceous, penetrating, and miscible with every Humour. And here they may act by their own peculiar Force remaining in the Liquor of the Infusion or Decoction; which Faculty of Action is then greatly increased by the Force of the vital Motion, and thus produces sudden Effects. But they want that Efficacy which remains in the distilled Water, tho' the Infusion contains more of it than the Decoction. But in the Decoction, however, this Want is supplied by a great Efficacy, which the boiling Heat communicates thereto, by enabling it to dissolve, and intimately mix the Virtues of the Plant with the Water by long Boiling. Whence, if the Operation were performed in a Still with its Alembic Head, and the exhaling Water returned to the remaining Decoctions, then these Decoctions would become exceedingly rich in the Virtues of the Plant; for such a Liquor will contain nearly all the Powers of the Subject. It must be well consider'd, that the Medicinal Virtues of Infusions and Decoctions, depend as much upon the Efficacy and Quantity of the hot Water received, as upon the Virtue of the Plant. This is known to Physicians. It is an Error, in condemning the Use of Tea, to attribute the Mischief wholly to the Leaves, when the larger Part is hot Water: And again, when we attribute the Virtue of enlivening the Spirits to the Drinking of Tea, the diluting Virtue of hot Water is not to be omitted. But we must remark, that some of the peculiar Virtues of Plants are alter'd by the Boiling. *Arum* grows milder by Decoction; the crude

Juice or Infusion of *Asarabacca* proves strongly Emetic; but this Virtue, by long continued Decoction, is changed to another, that is diuretic and aperient. For the Method of clarifying Decoctions, See Book I. Chap. ix.

Decoctum Album.

White Decoction.

Take calcin'd Hartshorn, an Ounce; Spring Water, three Pints; boil them together till only a Quart remains behind; to which without straining add, an Ounce of Cinnamon Water, made without Spirit, and two Drams of white Sugar; and mix them together. E.

The *Decoctum Album* of the London Dispensatory is thus directed:

Take of burnt Hartshorn prepared, two Ounces; of Gum Arabic, two Drams; of Water, three Pints; boil the Water away to a Quart, and strain it off.

Decoctum Album compositum.

Compound white Decoction.

Take of burnt Hartshorn, six Drams; Crab's Eyes, three Drams; Roots of the greater Comfrey and Tormentil, of each two Drams; Spring Water, three Pints; boil them together; so that there may remain a Quart of Liquor, when strained thick; to which add an Ounce of Cinnamon Water, made without Spirit; and half an Ounce of *Diacodium*; and mix them all together. E.

These Decoctions are generally us'd in Diarrhoeas and Dyenteries, but often very imprudently, and with very bad Effect; for to check Stools which are critical, and meant by Nature to relieve some Disorder, either in the Bowels or whole Habit, which is generally the Case, is destructive to the Patient, as it confines the morbid Matter, and thereby

by excites a worse Distemper than it is intended to cure. I have frequently known excessive Gripes, and dangerous Fevers caus'd by stopping Stools injudiciously. It is, therefore, seldom proper to stop Fluxes, without previously carrying off the offending Matter by due Purgings. It has been observ'd by all Physicians since *Hippocrates*; that a copious Hemorrhage from the Nose terminates a Fever, sometimes in its Infancy; but that a slight Hemorrhage is a fatal Symptom, because it shews that Nature is making an ineffectual Effort for her Relief. Something of the same Kind happens with Respect to Diarrhœas, which very frequently anticipate or cure a Fever, if copious and profuse; but if slight and Insufficient for the Purpose, they are to be esteem'd pernicious, and of bad Preage, and ought to be promoted rather than stop'd. These white Decoctions, however, may sometimes be proper to check the Exorbitance of Fluxes, tho' seldom to stop them. But their Use requires great Judgment.

Decoctum Amarum.

Bitter Decoction.

Take of Gentian Root, a Scruple; Tops of the lesser Centaury, Chamomile Flowers, and the Seeds of *Cardus Benedictus*, each a Dram; Spring Water, six Ounces; boil them together a little, then strain off the Decoction. *E.*

This was in the first Edition of the *Edinburgh Dispensatory*, but is omitted in the last. It is intended as a Stomachic.

Decoctum Amarum cum Senna.

Bitter Decoction with Senna.

In the former bitter Decoction, while hot, infuse, for a Night, one Dram of the Leaves of Senna; and strain off the Liquor. It is like-

wise prepared with a double and triple Quantity of Senna. *E.*

This was, also, in the former Edition of the *Edinburgh Dispensatory*, but is omitted in the last. It renders the preceding Decoction laxative.

Decoctum commune pro Clystere.

Common Decoction for Clysters.

Take of the Leaves of Mallows, of the Herb Mercury, and Chamomile Flowers, each half an Ounce; Fennel Seed, and Linseed, of each two Drams; Spring Water, a Pint and half; boil them together till a third Part of the Liquor is exhaled, then strain off the Remainder. *E.*

The *London Dispensatory* directs it thus:

Take of Mallow Leaves dry, one Ounce; dried Chamomile Flowers, sweet Fennel Seeds, of each half an Ounce; of Water, one Pint; after Boiling strain it off. *L.*

These Decoctions are only us'd in Clysters, as Vehicles for things of greater Consequence. In the former College Dispensatory it was thus directed; but the Differences are not very material.

Take of Leaves of Mallows, Violets, Pellitory of the Wall, Beets, and Mercury, of each one Handful; of Chamomile Flowers two Pugils; of sweet Fennel Seed, half an Ounce; of Linseed, two Drams; and boil them in a sufficient Quantity of common Water, to yield a Pint when strain'd,

Decoctum Diascordii.

Decoction of Diascordium.

Take of Diascordium, an Ounce; Japan Earth, two Drams; Spring Water, a Pint and a half; boil them so as to leave a Pint of Liquor, when strain'd thick; to
Z z which

which add of Cinnamon Water, made with Spirit, and the Syrup of *Diacodium*, each an Ounce; and mix them together. *E.*

This is an Astringent, and seems intended principally to check Fluxes, and may be taken by Way of Draught, or in Clysters. But it is a Medicine to be us'd with the utmost Caution. See the preceding Remarks on the *Decoctum Album*.

Decoctum emolliens pro fotu.

The emollient Decoction for Fomentations.

Take of the Leaves of Mallows, one Ounce; Flowers of Chamomile, Melilot, and Elder, of each half an Ounce; Seeds of *Fœnugreek*, one Ounce; boil them in two Quarts of Spring Water.

It is also made without the Seeds of *Fœnugreek*. The Title expresses the Uses.

Decoctum ad Ictericos.

Decoction for the Jaundice.

Take the Roots together with the Leaves of the greater Celandine, the Roots of Turmeric, and Mad-dar, of each an Ounce; Spring Water, three Pints: Boil them together till there remains a Quart of the strain'd Liquor; to which, when cold, add the Juice of two hundred Millepedes, and two Ounces of the Syrup of the five opening Roots, and mix them together. *E.*

This seems very well contriv'd to answer the Design its Title expresses. But it must be taken in large Quantities, in order to answer any good Purpose.

Decoctum Lignorum.

Decoction of the Woods.

Take three Ounces of the Shavings of Guaiacum Wood; two Oun-

ces of ston'd Raisins of the Sun; a Gallon of Spring Water; boil them together over a gentle Fire to two Quarts; towards the End of the Operation, add one Ounce of the Shavings of Sassafras Wood, and half an Ounce of sliced Liquorice; then pour off the Decoction when settled. *E.*

Experience convinces us, that there is a very great Difference betwixt a Decoction of the fresh Chips, or Rasplings of Guaiacum, and one of those which are old and dry, which is what are commonly used with us. The Reason of this should seem to be, that the native saponaceous Virtue in the green Plant preserves the Resin soluble, the Parts of which cohere together when dry, and become more difficult to dissolve. See the Article *Guaiacum* in the *Materia Medica*.

Decoctum ad Nephriticos.

Nephritic Decoction.

Take of the Roots of Marsh-mallows, Liquorice, and Rest Harrow, each half an Ounce; Linseed, and wild Carrot Seed, of each three Drams; Pellitory of the Wall, an Ounce; four ripe Figs; ston'd Raisins of the Sun, two Ounces; Spring Water, three Quarts; boil them together, so as to make two Quarts of Liquor when strain'd. *E.*

As this Decoction is emollient, in Nephritic Paroxysms it may contribute much to the Relaxation of the urinary Passages, and consequently to the easy Passage of the Stone or Gravel. It will be a much better Medicine, if exhibited with an Addition of Nitre, and some Syrup of Marsh-mallows. It should be drank very plentifully.

Decoctum Nitrosum.

Decoction of Salt-Petre.

Take of well purified Nitre, half an Ounce; white Sugar, two Ounces; Cochineal, a Scruple; Spring-water, five half Pints: Boil them together to a Quart; then pour off the Decoction, after it is clarified by standing. *E.*

The Nitre renders this an admirable Medicine in Fevers, and febrile Distempers. But as Nitre is so readily given in Substance, or dissolved in any diluting Fluid, this does not seem altogether necessary as a Shop-Medicine. If the Cochineal is intended for any thing more than to disguise the Medicine, it is very trifling; otherwise very unfair, and too much mysterious.

Decoctum Pectorale.

Pectoral Decoction.

Take of Raisins of the Sun stoned, and Barley, each an Ounce; four fat Figs; Spring-water, six Pints: Boil to four Pints, at the End of the Decoction adding of the Root of *Florentine* Orrice and Liquorice, each half an Ounce; of the Leaves of Harts-tongue and Colts-foot, each an Ounce: Strain off the Liquor. *E.*

The *London* Dispensatory directs the Pectoral Decoction thus:

Take common Barley, Raisins stoned, Figs, of each two Ounces; of Liquorice-root, half an Ounce; of Water, two Quarts. Boil the Water first with the Barley; then add the Raisins; and afterwards, towards the latter End of the Decoction, the Figs and Liquorice; the Decoction will then be fully compleated, when one Quart only of the Liquor will be left after Straining. *L.*

In the former College Dispensatory it was thus directed:

Take of stoned Raisins, one Ounce; of Dauctyls, No. six; of fat Figs No. eight; of Barley cleansed, one Ounce; boil these in three Pints of Spring Water to the Consumption of a third Part, towards the End putting in of Liquorice-root, half an Ounce; of the Leaves of Maiden-Hair, Ground-Ivy, Scabious and Coltsfoot, of each one Handful. Let them stand in Infusion a quarter of an Hour; and then strain off the Liquor.

It would be very trifling to dispute which of these Pectoral Decoctions is best. It is of more Consequence to remark, that an Infusion of the Pectoral Ingredients in hot Water makes a Medicine much more agreeable to the Stomach, and not less efficacious. These Decoctions and Infusions must be taken in very large Quantities, in order to produce any considerable Effect; and indeed no great Dependance is to be had on them, without the Addition of something more efficacious.

Decoctum Tamarindorum cum Senna.

Decoction of Tamarinds with Senna.

Take of Tamarinds, six Drams; Crystals of Tartar, two Drams; Spring Water, a Pint and a half; boil them in an earthen Vessel to one Pint; in this, whilst hot, infuse, for a Night, one Dram of Senna Leaves, and to the strain'd Liquor add one Ounce of Syrup of Violets. This is also sometimes made with a double, or triple Quantity of Senna.

This is an admirable cooling Medicine in febrile Disorders, especially in Case of Costiveness.

Infusum amarum.

The bitter Infusion.

Take of the Root of Gentian, half a Dram; the Tops of the lesser Centaury, one Dram; pour upon them

them four Ounces of boiling Spring Water: Infuse for four Hours and filtre it. *E.*

This, in the last Edition of the *Edinburgh Dispensatory*, is substituted for the *Decoctum amarum* of the former Editions, and seems to be a better Medicine.

Infusum amarum cum Senna.

The bitter Infusion with Senna.

To the preceding Infusion, add of the Leaves of Senna, one Dram; the Seeds of Fennel, half a Dram. *E.*

It is sometimes made with double or treble the Quantity of Senna.

The *London Dispensatory* orders a bitter Infusion, thus,

Infusum amarum simplex.

The simple bitter Infusion.

Take Gentian Root, the yellow Rind of Lemon-peel fresh, carefully separated from the inner white Part, of each half an Ounce; of the yellow Rind of *Seville* Orange-peel, also carefully separated from its inner white Part, but dried, a Dram and a half; of boiling Water, three quarters of a Pint: After infusing for an Hour or two, strain it, either through Paper or a Cloth, without any pressing out. *L.*

This is intended as a Stomachic Bitter, and seems very well adapted to that Intention.

Infusum amarum purgans.

The purging bitter Infusion.

Take the Leaves of Sena, the yellow Rind of fresh Lemon-peel, of each three Drams; Gentian Root, the yellow Part of *Seville* Orange-peel dried, the lesser Cardamom Seeds husked, of each half a Dram; of boiling Water, five Ounces: After infusing it till the Liquor is cold, strain it off. *L.*

This should seem to be a very good Stomachic Laxative; to which may be added at Discretion any proper Cathartic Ingredient, in order to render it more Cathartic.

Infusi Sennæ Unciæ quatuor.

A Four-Ounce Infusion of Senna.

Take of the Leaves of Senna, three Drams; and of the great Water Fig-wort, two Drams; bruised Ginger, and Salt of Tartar, of each ten Grains; boiling Water, four Ounces: Infuse them together for four Hours, then strain off the Liquor. *E.*

A Decoction or Infusion of Senna is the common Basis of Cathartic Potions; but is seldom given without the Addition of something to render the Operation brisker.

Infusum Senæ commune.

The common Infusion of Sena.

Take Leaves of Sena, one Ounce and a half; of Crystals of Tartar, three Drams; of the lesser Cardamom Seeds husk'd, two Drams; of Water, one Pint. Boil the Crystals of Tartar in Water till they are dissolved; then pour the Water, while boiling-hot, upon the Sena and the rest. When the Liquor is cold, strain it off. *L.*

In this the Crystals of Tartar seem to be judiciously substituted for the Salt of Tartar in the former College Dispensatory. It is, like the preceding, used for the Basis of Cathartic Potions.

Infusum Senæ Limonium.

The Infusion of Sena with Lemon.

Take of the Leaves of Sena, one Ounce and a half; of the Yellow of fresh Lemon-peel, an Ounce in Weight; of Lemon-juice, an Ounce in Measure; of boiling Water,

one

one Pint. Infuse till cold, and then strain. *L.*

In the Narrative prefix'd to the College Dispensatory, we are told that this Method of adding an Acid in the Infusion of Senna, whether of Tartar or Lemon-juice, is contrary to that in our present *Pharmacopæia*, where an Alcaline Salt is made an Ingredient. In Theory Acids weaken watry Tinctures from Vegetables; and Alcalies rather increase the Quantity extracted; but Experience has sufficiently shewn that these Infusions as here directed, do not fail in their Intention; and, in a Medicine very nauseous to many, it is of principal Consequence to prepare it so, that the lightest and least disagreeable Parts may be extracted,

Emulso Communis.

Common Emulsion.

Take of the four greater cold Seeds, an Ounce; and blanch'd sweet Almonds, half an Ounce: Beat them very well in a Marble-mortar, then pour on by degrees a Quart of Spring-water. Mix them well, and, when strain'd, add an Ounce of Cinnamon-water, without Spirit, and two Drams of white Sugar. *E.*

Emulso Arabica.

Arabic Emulsion.

This Emulsion is made after the same Manner as the preceding; first boiling in the Water, till perfectly dissolved, three Drams of bruised Gum Arabic. *E.*

The *London Dispensatory* orders the *Emulso Communis*, or common Emulsion, thus;

Take of sweet Almonds blanch'd, one Ounce; of Gum Arabic, half an Ounce; of double refined Sugar, six Drams; of Barley-water, one Quart. Dissolve the Gum

in the Barley-water hot, and, when the Water is quite cold, pour it gradually upon the Almonds pounded with the Sugar, rubbing them together, that the Liquor may grow milky; then strain it off. *L.*

Boerhaave remarks, with respect to Emulsions in general, that the Liquor thus prepared, resembles in many Respects the Chyle of Animals, which is itself prepared from Vegetables in their Bodies by Chewing, Ruminating, and the Action of the Stomach, before it is mixed with the Bile in the Duodenum. The Thing appears plain from the white Colour, the mild Odour, the sweet Taste, the thick Unctuousness, and the great Disposition they both have to turn sour. So likewise, if the Liquor thus prepared stands some Time in a tall cylindrical Vessel, it spontaneously separates into a white, thick and almost totally oily Part, which floats at the Top, and into a thinner, transparent, bluish Liquor, that remains below; wherein it perfectly resembles Milk, as dividing itself into Cream, and thin Milk. Again, if this Liquor be kept for some Time in a warm Air, it turns sour, and afterwards considerably sharp, tho' without acquiring the proper Rancidness of an express'd Oil; in which Respect also it perfectly agrees with Milk, which acquires the like Acidity in such an Air, without becoming rancid like pure Oil: Whence this farther Remark should be made, that in acute Distempers Emulsions may be given with greater Safety than express'd Oils. But I could never, says *Boerhaave*, by any Art of Coagulation obtain such a Curd from this Liquor as Milk affords; whence there is this Difference betwixt the Milk of Vegetables and Animals. The Reason of the Difference between an express'd

press'd Oil, and an Emulsion, seems principally this, that, the mealy Part in the Grinding being constantly in fine Particles interposed betwixt the pure Oil, the Parts of this Oil are so broke and separated from one another, that, its Tenacity being chang'd, it becomes miscible with Water, and thence appears in the Form of Milk, which also consists of a fat Substance dissolved in Water; whereas when a pure Oil is obtained by Expression, the Parts thereof, being in Contract with each other, do not admit of Water, nor suffer it to be mixed among them. Again, the large Quantity of Meal, intermix'd amongst the Oil in the Emulsion, causes it to turn sour, not rancid; and hence appears the Reason why the Liquor is white; for Whiteness always ensues as often as Oil is intimately divided and mix'd with Water. If Oil be pour'd upon a Glass of Water, the two Liquors will remain separate and transparent; but if shook briskly together, they will unite in some measure, and during that Union the Mixture will appear perfectly white; but if now suffer'd to rest, the Oil collects at the Top, the Water sinks to the Bottom, and the Whiteness immediately vanishes; and the same Thing frequently happens in Animal Milk, distill'd Oleaginous Waters, and these Emulsions. It is also certain, that the Whiteness becomes greater the larger the Quantity of Oil, and in this Case the Liquor sooner grows rancid; but the less the Oil, the less white the Liquor, and the sooner it turns sour. In the Summer, Emulsions will scarce keep above ten Hours, but in the Winter longer. To conclude, this Method of making Emulsions gives Light to the Action of Mastication; for, all the Foods prepared from Corn abounding with a latent Oil, and being ground by the Teeth in chewing, and mix'd with the Saliva, the

longer they are thus acted upon in the Mouth, the nearer they approach to these Emulsions, and at length always turn white, when the Saliva, Salt, and Oil are well ground together. The Operation thus begun in the Mouth is carried on in the Stomach, and more perfected in the Intestines, where the Matter still retains the same Nature, except that new Juices are perpetually mixing themselves therewith, and communicating their Properties; whereas in our Pharmaceutical Operation there is no Addition but of Water alone; and hence we may understand the artificial Distinction between the first Chyle, and the Milk of Animals.

Emulsions are so readily made *ex tempore*, and are so very soon spoil'd, that they are not fit for Official Medicines, but may be vary'd occasionally according to the Intention of the Prescriber. They are used when any considerable Acrimony abounds, and particularly when the Urine is discharged with Pain and Difficulty, from any Cause whatever.

Aqua Hordeata.

Barley-Water.

Take of Pearl-Barley, two Ounces; of Water, two Quarts: Wash the Barley first well with some cold Water; then, pouring on about half a Pint of Water, boil it a little while; and this Water, which will be coloured, being thrown away, put the Barley into the Quantity of Water above directed, first made boiling hot, and boil away to half. *L.*

This is the common Liquor used for cooling, moistening, and diluting in febrile Disorders. But as the Method of making it is universally known, as it is soon made, and will not keep, it was less necessary to describe it in a Dispensatory.

Fetus Communis.

The Common Fomentation.

Take the Leaves of Southernwood, or of Lavender-Cotton dry, the Tops of Sea-wormwood also dry, Chamomile-flowers, of each one Ounce; of Bay-leaves dry, half an Ounce; of Water, three Quarts. After a slight Boiling, strain the Water off. *L.*

This seems a convenient Basis for a Fomentation, to which Spirit of Wine, or whatever the Prescriber judges proper, may be added. The medicinal Virtues may be learned from those of the Ingredients which enter its Composition.

Jus Viperinum.

Viper Broth.

Take a Viper of a middle Size, without the Skin, Head, or Entrails; of Water, a Quart: Boil to about a Pint and half. Remove all from the Fire, and when the Water is cold, if the Viper be not a dried one, take away the congeal'd Fat; then take a Chicken of a middle Size, drawn, and the Skin, with all the Fat taken off, and put it whole into this Decoction while cold. Set it upon the Fire till it boils; then remove it from the Fire; take out the Chicken, and cut the Flesh of it into small Pieces, which put again into the Water, and set it over the Fire; but, as soon as it begins to boil up, pour it off, first having taken away whatever Scum may have risen. *L.*

It would be ridiculous to make Remarks upon this Culinary Preparation, because every Cook-maid in England is qualify'd to do it better than Hippocrates or Boerhaave, if they were now alive. I shall only observe, that the last-mentioned Author was of Opinion; that Broths taken frequently, and in a small

Quantity at a Time, are most excellent Restoratives, and highly efficacious in relax'd Habits; and Chicken Broth may perhaps be as good as any other. On this Account the *Jus Viperinum* may be a good Restorative; but I esteem the Chicken the principal Ingredient to be depended on; for the Flesh of one Viper, let the Virtues of the Animal be never so great, cannot be sufficient to answer any Intention; and besides, so far as I have been able to learn from Experience, Vipers have no one Virtue to recommend them, that can in the least be depended upon; but it is very usual to overlook the Efficacy of Things we are daily conversant with, and ascribe their good Effects to others that are not so common, tho' less to be depended upon. And I am pretty certain, that whoever experiences Chicken Broth with and without the Viper, will find as much Service from the latter as from the former.

Mucilago Seminum Cydoniorum.

Mucilage of Quince-Seed.

Take of Quince-Seed, a Dram; of Water, six Ounces: Boil it with a gentle Fire till the Water grows roapy, resembling the White of an Egg; then strain it through a Linnen Cloth. *L.*

This and the Mucilage of Gum Tragacanth seem to be pretty equal with respect to their Virtues. They are principally used, mixed with other Ingredients, to hold in the Mouth, and be swallow'd gradually. Sometimes they are made a Vehicle for heavy Substances, which will not so readily be suspended in any thing that is perfectly fluid.

Serum Aluminosum.

Alum Whey.

Take of Cows-milk, one Pint; of Alum in Powder, two Drams;
Z z 4 Boil

Boil till a Whey is formed, which is to be well separated from the Curd. *L.*

The Virtues of this may be learn'd from those of Alum.

Serum Scorbuticum.

Scorbutic Whey.

Take of Cows-milk, one Pint; of

the Scorbutic Juices a Quarter of a Pint: Boil till a Whey is form'd, which is to be well separated from the Curd. *L.*

The Title expresses the Virtues.

CH A P. VII.

Of SYRUPS.

GENERAL RULES for making of SYRUPS.

I. **T**HE Sugar, employ'd for Syrups made without Coction, should first be boil'd with Water to a Candy Consistence, observing to clarify it with the White of Eggs, and by Despumation.

II. Tho' a double Weight of Sugar, in Proportion to the Liquor, may be required in making such Syrups, yet a less Proportion will generally suffice. First, therefore, dissolve only an equal Quantity of Sugar; then, by degrees, add a little more in Powder till it remain undissolved at the Bottom; to be afterwards incorporated by the gentle Heat of a Water-bath.

III. Acid Syrups, or those made with the Juices of Fruits, should not be put into Copper Vessels, unless such as are tinn'd.

IV. The Vegetables used either for Decoctions or Infusions are to be moderately dried, unless where they are expressly required fresh-gather'd.

V. Syrups made by Coction are to be clarify'd with the White of Eggs, except *Diacodium*, which therefore requires the purest Sugar.

VI. The Solutive and Purging Syrups ought rather to be made of brown Sugar.

Syrupus ex Alliq.

Syrup of Garlick.

Take of the Roots of Garlick sliced, one Pound; of boiling Water, a Quart. Steep the Garlick in the Water twelve Hours in a close Vessel, and in the Liquor strain'd dissolve a sufficient Quantity of Sugar, so as to make the Syrup. *L.*

The Virtues of this may be learn'd from those of Garlick. It seems principally intended as a Pectoral.

Syrupus de Althæa.

Syrup of Marshmallows.

Take of the Root of Marshmallows, three Ounces; candy'd Eryngo-Root, one Ounce; Liquorice, half an Ounce; Maidenhair, or *Trichomanes*, and Pellitory of the Wall, each one Ounce; Spring-water, six Pints: Boil to the Consumption of one Third. To the strain'd Liquor, depurated by subsiding, add white Sugar, four Pounds. Boil gently, continually stirring, till a Syrup is form'd. *E.*

In the London Dispensatory the *Syrupus ex Althæa* is thus prepar'd:

Take of the fresh Roots of Marshmallows, a Pound; of double refin'd Sugar, four Pounds; of Water, one Gallon. Boil the Water with the Roots till it is half wasted. After it is quite cold pour

pour it off, and press it out. Let the Liquor stand by for a Night, that its Faces may subside. In the Morning pour off the Clear, and, adding the Sugar, boil all down to the Weight of six Pounds.

L.

No great Efficacy can be expected from any Quantity of this Syrup that can be taken for a Dose. It is used however, not improperly, to sweeten Emollient Decoctions or Infusions, principally those intended to make Gravel or a Stone to pass off with Ease.

Syrupus Artemisiae.

Syrup of Mugwort.

Take of the Root of Madder, two Ounces; those of round Birth-worth and Turmeric, of each an Ounce; Spring-water, a Gallon. Boil them together till a fourth Part be wasted; and add, towards the End of the Operation, Leaves of Mugwort, an Ounce; those of Calamint, Dittany of Crete, Feverfew with the Flowers, Origanum, common Penny-royal, Rue, and Savine, of each half an Ounce; the Seeds of *Daucus* of Crete (or of wild Carrot) and those of Lovage, of each three Drams. To the strain'd Liquor put six Pounds of white Sugar, and make it into a Syrup, according to the Rules of Art, by boiling it over a gentle Fire. *E.*

This Syrup is omitted in the last Edition of the *Edinburgh Dispensatory*; but I have given it a Place here, because it seems as well contrived, and to be of as great Efficacy as any of the other Syrups. It is calculated principally for promoting the Uterine Discharges.

Syrupus à Cortice Aurantiorum.

Syrup of Orange-Peel.

Take of the external Rind of fresh Oranges, six Ounces; boiling Spring-water, three Pints. Infuse them in a close Vessel, with a

gentle Heat in *Balneo Mariae*, for the Space of six Hours; then strain off the Liquor, and add to it twice its own Weight of white Sugar; and thus make it into a Syrup, without Boiling. *E.*

A Syrup very like this is order'd in the *London Dispensatory*, under the Title of

Syrupus à Corticibus Aurantiorum.

Syrup of Orange-Peel.

Take of the outer yellow Rind of fresh *Seville* Orange-Peel, eight Ounces; of boiling Water, five Pints. Steep the Peel in the Water for a Night in a close Vessel, and in the Morning dissolve in the Liquor strain'd, of double refin'd Sugar beaten to Powder, as much as is sufficient to make a Syrup. *L.*

The Virtues of these two Syrups may be learn'd from those of Orange-Peel. They should seem to be grateful and beneficial to the Stomach.

Syrupus à Succo Aurantiorum.

Syrup of Orange-Juice.

Take of the clarified Juice of Oranges, a Pint; white Sugar, two Pounds; and make a Syrup thereof, without Boiling, according to the Rules of Art. *E.*

Syrupus Balsamicus.

Balsamic Syrup.

Take of the Syrup of Sugar, two Pounds, fresh made. Remove it from the Fire, and, when almost cold, mix gradually with it of the *Tinctura Tolutana*, an Ounce, and let them be mix'd by Agitation. Then let the Syrup stand in a Bath-heat till the Spirit is all exhaled. *E.*

The Method of making the Balsamic Spirit, directed in the *London Dispensatory*, is thus:

Take of Balsam of *Tolu*, eight Ounces; of Water, three Pints. Boil the Balsam in the Water in a circulatory

circulatory Vessel; or at least in a Matras with a tall Neck, and the Orifice lightly cover'd, for two or three Hours. When the Water is cold, and strain'd off, add double refin'd Sugar to make it into a Syrup. *L.*

The Virtues of both these may be learn'd from those of Balsam of Tolu.

Syrupus Capilli Veneris.

Syrup of Maidenhair.

Take of the Herb Maidenhair, half a Pound; shaved Liquorice, two Ounces; boiling Spring-water, three Quarts: Let them stand together for a Night, then boil them a little, and strain out the Liquor by Expression; whereto add its own Weight of white Sugar, and boil it to the Consistence of a Syrup. *E.*

This Syrup is omitted in the last Edition of the *Edinburgh Dispensatory*. As it is a very trifling Medicine, I have only given it a Place here for the Satisfaction of some who have an Opinion of it. The Syrup of *Capillaire*, sold in the Coffee-houses, ought to be made of the *Canada* Maidenhair and Orange-flower Water. The *London Dispensatory* directs a Syrup of Maidenhair under the Title of *Syrupus Pectoralis*, which see.

Syrupus Caryophyllorum.

Syrup of Clove-*July*-Flower.

Take of fresh gather'd Clove-*July*-flowers, clipt clear from their white Heels, a Pound; boiling Spring-water, three Pints: Let them stand together one Night, then strain off the Liquor, and add thereto twice its own Weight of white Sugar, and thus make it into Syrup, without Boiling, according to the Rules of Art. *E.*

In the *London Dispensatory* they order three Pounds of the Clove-*July*-flowers to five Pints of boiling Water.

I think this Syrup is only valued for its Colour and Flavour; but is of no great Use in Medicine.

Syrupus de Cichoreo cum Rheo.

Syrup of Succory with Rhubarb.

Take of Rhubarb sliced and bruised, six Ounces; boiling Spring-water, two Quarts: Let them infuse, in a gentle Heat, for two Days; and, after a very little Boiling, strain off the Liquor; to which add, of the clarified Juice of Succory, two Quarts; and of white Sugar, six Pounds: Then boil them up to a Syrup, in which, whilst it is yet warm, mix a Scruple of the distill'd Oil of Cinnamon, first received upon a little Sugar. This may also be made with the Decoction of Succory. *E.*

This is omitted in the last Edition of the *Edinburgh Dispensatory*. I have given it a Place here, because it is a pretty Purge for Children, and much used.

Syrupus Croci.

Syrup of Saffron.

Take of Saffron-wine, a Pint; of double refined Sugar, twenty-five Ounces; which dissolve in the Wine so as to make a Syrup. *L.*

This is a Cordial, and a very agreeable Syrup, and of Use in Medicine, as a sufficient Dose of the Saffron to answer some good Purpose, may be thus given at once.

Syrupus Cydoniarum.

Syrup of Quinces.

Take of depurated Juice of Quinces, three Pints; of Cinnamon, one Dram; Cloves and Ginger, of each half a Dram; of Red Wine, one Pint; of double refined Sugar, nine

nine Pounds. Digest the Juice with the Aromatics six Hours in a Heat of Ashes; then add the Wine, and strain the Liquor off; and lastly, add the Sugar to make a Syrup. *L.*

This is a very agreeable Syrup, and proper to sweeten Astringent Medicines, or take off the disagreeable Flavour of others.

Syrupus Kermesinus.

Syrup of Kermes.

Take of the Juice of Kermes-berries, a Pound; white Sugar, two Pounds; and make them into a Syrup without Fire.

That is the best esteem'd which comes to us ready prepared from the Southern Part of France, especially if no Fire be used in the making. *E.*

The Virtues of this may be learn'd from those of the Kermes.

Syrupus è Succo Limonum.

Syrup of Lemon-Juice.

This is made of the Juice of Lemons after the same Manner as the Syrup of Orange-Juice. *E.*

In the London Dispensatory it is ordered thus :

Take of Lemon juice, after it has stood till its Fæces are subsided, and it has been strain'd off, a Quart; of double refined Sugar, fifty Ounces. Dissolve the Sugar in the Juice, so as to make the Syrup. After the same Manner are made the Syrups of Mulberries, and of Raspberries. *L.*

The Virtues of these may be learn'd from those of the Ingredients.

Syrupus Myrtinus.

Syrup of Myrtle.

Take of Myrtle Berries, two Ounces; Tormentil Root, red Roses, red Sanders, Pomegranate Bark, Balauſtines, and the Seeds of Su-

mach, each an Ounce; cut and bruise the Ingredients; then boil them in a Gallon of Spring Water, till only one half remains behind; to which, when strain'd, add four Pounds of white Sugar, and boil them together into a Syrup. *E.*

This is omitted in the last Edition of the Edinburgh Dispensatory; it is intended as an Astringent.

Syrupus Papaveris albi, seu de Meconio, vulgo Diacodium.

Syrup of white Poppies, or *Diacodium.*

Take of the Heads of the white Poppy, in a mild Degree of Maturity, and moderately dried, fourteen Ounces; boiling Spring Water, a Gallon: Let them infuse for a Night; then boil to the Consumption of one Half of the Liquor; strongly press out the Remainder, and add thereto four Pounds of white Sugar; and boil them up to a Syrup. *E.*

The London Dispensatory directs this to be thus made, under the Title of,

Syrupus è Meconio sive Diacodium.

Diacodium.

Take of the Heads of dried white Poppies without their Seeds, three Pounds and a half; of Water six Gallons. Slice the Heads, and boil them in the Water, often stirring them, that they may not burn, till about a Third only of the Liquor is left, which will be almost all imbibed by the Poppy Heads; then take all from the Fire, and press the Liquor strongly out from the Heads; in the next Place boil the Liquor by itself to about two Quarts, and strain it while hot, first thro' a Sieve, and then thro' a thin Flannel; set it by for a Night, that what Fæces may have passed the Strainers, may subside;

next

next Morning pour off the clear Liquor, and boil it with six Pounds of double refined Sugar, till the Whole comes to the Weight of nine Pounds, or a little more, that it may become a Syrup of a just Consistence. *L.*

As this Syrup is of very great Importance in Medicine, I shall here observe, what has been said of it by the principal Pharmaceutical Writers. First, *Quincy* remarks, that this Syrup will not bear the usual Way of Clarification, without losing much of its Strength, as an Opiate. And such Difference will happen on one Account or other, tho' made with the utmost Care, as renders it difficult to be found always of the same Strength. The Author of the *Pharmacopœia Reformata* judiciously remarks, that, notwithstanding all the Care which the Committee have taken about this Syrup, it will still greatly differ in its Strength; for in some Seasons the Poppy Heads will contain more Opium in Proportion to their Weight than in others, nor will the different Skill of the Operator, and certain Circumstances, in the Operation itself, contribute a little to render this Syrup unequal in Strength, tho' the utmost Care be taken. The Writers of the *Edinburgh Dispensatory* seem to have well weighed the Inconveniences which attend the usual Methods of preparing this Syrup, and accordingly have ordered the Decoction of the Poppy Heads in a Manner which sufficiently shews their Skill in Pharmacy. But perhaps all the Pains hitherto taken in the Preparation of this Medicine, are as unnecessary as defective; for if an Opiate be really wanted in the Form of a Syrup, and if it be absolutely necessary to determine, in a very exact Manner, the Strength of the Syrup, with Regard to the Opium, it would be more to the Purpose to dissolve a certain Quantity of purified Opium, well sepa-

rated from its resinous Parts, in a certain Quantity of the white Syrup, or rather in some Water to be boiled down to a certain Pitch, and then made into a Syrup with a sufficient Quantity of Sugar, without any farther Boiling. In my own Opinion this Syrup and all others of the same Kind, are of very little Use in Medicine; because all the Ends it can answer, are much better provided for by crude Opium. The *Syrupus à Meconio*, or *Diacodium*, is, indeed, more readily taken by Children; but to these it is very seldom proper to give it; and besides, this Circumstance tempts Nurses to exhibit it frequently to Children in order to compose them, to their utter Destruction.

Syrupus Papaveris Erratici.

Syrup of wild Poppies.

Take of the fresh Flowers of wild Poppy, four Pounds; of boiling Water, four Pints and a half. Set the Water poured on the Flowers over the Fire, and stir the Flowers in, till they are all thoroughly wet; and, as soon as the Flowers are sunk, let them steep for a Night; next Day pour off, and press out the Liquor, setting it by for another Night, that its Faces may subside; then with a proper Addition of double refined Sugar make the Syrup. *L.*

This is also an Opiate. The particular Virtues may be learn'd from those of the *Papaver Rubrum*, *sive Erraticum*.

The Proportion of the Poppy-flowers in this Syrup is greater to the Water than in that of the *Edinburgh Dispensatory*, which is thus directed under the Title of

Syrupus Papaveris Rhæados.

Syrup of Red Poppies.

Take of the fresh red Poppy-flowers, a Pound; boiling Spring-water, three Pints: Let them stand together

ther one Night, then strain the Liquor, add to it two Pounds of white Sugar, and boil it up to a Syrup. *E.*

Syrupus Pectoralis.

The Pectoral Syrup.

Take of the Roots of *Florentine* Orris, and of *Elicampane*, each an Ounce and a half; of *Liquorice*, two Ounces; of the Flowers of *Coltsfoot*, the Herb *Maidenhair*, or in Defect of that *Trichomanes*, of the Leaves of *Groundivy*, each an Ounce; of fat Figs, twelve in Number; Spring-water, eight Pints. Boil to the Consumption of one Fourth, and to the strain'd Liquor add six Pounds of white Sugar. Boil to the Consistence of a Syrup. *E.*

This, as it should seem, deserves the Name of a Pectoral Syrup much better than the following, and appears to be a very good Medicine in a Cough and Hoarseness.

Syrupus Pectoralis.

Pectoral Syrup.

Take of the Leaves of *English* *Maidenhair* dried, five Ounces; of *Liquorice*, four Ounces; of boiling Water, five Pints. Steep the Ingredients for some Hours, and, when the Liquor is strain'd off, dissolve in it a proper Quantity of double refined Sugar to make a Syrup. *L.*

See *Syrupus Capilli Veneris.*

Syrupus à Floribus Persicæ.

Syrup of Peach-Blossoms.

This is made with the Infusion of fresh Peach-Blossoms, in the same Manner as the *Syrupus Papaveris Rheados*. *E.*

It is said to be a pretty Puke for Children, and opens a little downwards; for which Purpose it is much

in Use. Its Dose is from two Drams to one Ounce.

Syrupus à Peto, sive Nicotiana.

Syrup of Tobacco.

Take two Drams of the Leaves of *Virginia* Tobacco; half an Ounce of shaved *Liquorice*; and six Ounces of boiling Spring-water: Let them infuse warm for a Night; then strain off the Liquor, put to it an equal Weight of Honey, and boil it into a Syrup. *E.*

This is omitted in the last Edition of the *Edinburgh* Dispensatory, and very prudently; for I know of no Use it is of, except for a Vomit, and we have much better and safer Emetics.

Syrupus Pæoniæ.

Syrup of Piony.

This is made with an Infusion of fresh Piony-flowers, after the same Manner as the *Syrupus Papaveris Rheados*. *E.*

The Virtues of this may be learn'd from those of Piony,

Syrupus Pulegii.

Syrup of Pennyroyal.

Take of the Leaves of common Pennyroyal, six Ounces; boiling Spring-water, three Pints: Let them infuse warm in a close Vessel for one Night; then strain off the Liquor, clarify it, and add thereto twice its own Weight of white Sugar, so as to make it into a Syrup without Boiling. *E.*

If the Physician who prescribes this Syrup has any Intention in so doing, it may be much better answer'd by an Infusion of the Herb, like Tea.

Syrupus Quinque Radicum.

Syrup of the five opening Roots.

Take of the five opening Roots, each two Ounces; Spring-water, three Quarts:

Quarts: Boil them together till a 3d Part of the Liquor be evaporated; then press out the Remainder, and with four Pounds of white Sugar boil it up to a Syrup. *E.*

The former *London Dispensatory* directs eight Ounces of Vinegar to be added to it at the latter End. This, with the Vinegar, makes a very grateful Syrup, and is frequently prescribed amongst Pectorals and Aperients.

Syrupus Rosarum Pallidarum.

Syrup of Damask-Roses.

This is made with a double Infusion of fresh Damask-Roses, after the Manner of the *Syrupus Papaveris Rheados*. *E.*

This is esteem'd gently laxative.

Syrupus Rosarum Solutivus.

Solutive Syrup of Roses.

Take the Decoction left after the Distillation of six Pounds of Damask-Roses, and five Pounds of double refined Sugar: Boil down the Decoction press'd out to three Pints, and set it by for a Night, that its Fæces may subside: Next Morning pour off the clear Liquor, and, adding the Sugar, make it into a Syrup, by boiling it away to the Weight of seven Pounds and a half. *L.*

This makes a tolerable good Purge for Children and weak People, and is often added in Prescriptions to Cathartic Decoctions and Infusions.

Syrupus de Rosis siccis.

Syrup of dried Roses.

Take of red Roses, half a Pound; and of boiling Spring-water, two Quarts: Let them steep together for a Night; then, after a little Boiling, strain off the Liquor, add thereto four Pounds of white Sugar, and boil it up to a Syrup. *E.*

Syrupus Sacchari.

Syrup of Sugar.

Take of white Sugar and Spring-water, each an equal Quantity; and boil them up to the Consistence of a Syrup. *E.*

This Syrup seems to be as good as most of the Alterative Syrops; that is, for nothing at all, for any medicinal Purpose of Consequence.

This is directed in the *London Dispensatory* under the Title of *Syrupus simplex*.

Syrupus Scilliticus.

Syrup of Squills.

Take of Vinegar of Squills, a Pint and a half; Cinnamon, Ginger, of each an Ounce; of double refined Sugar, three Pounds and a half. Steep the Spices for three Days in the Vinegar, and, when strained, make the Syrup by adding the Sugar. *L.*

In the *Edinburgh Dispensatory* the *Syrupus Scilliticus* is thus order'd:

Take of Vinegar of Squills, two Pints; of white Sugar, four Pounds. Make into a Syrup without Coction. *E.*

These seem to be intended to promote Expectoration, and assist in bringing up viscid Phlegm.

Syrupus à Spina Cervina.

Syrup of Buckthorn.

Take of the Juice of Buckthorn-berries ripe and fresh, one Gallon; Cinnamon, Ginger, Nutmegs, of each one Ounce; of double refined Sugar, seven Pounds. Set the Juice by a few Days, that its Fæces may separate; then strain it, and, in a small Quantity of it, infuse the Spices. Boil down the rest, towards the End adding that wherein the Spices have been infused, but strain'd from them, that the

the Whole may be reduced to two Quarts; then add the Sugar, and make the Syrup. *L.*

This is, in the *Edinburgh Dispensatory*, order'd to be made somewhat differently under the Title of

Syrupus de Spina Cervina, seu Rhamno Cathartico.

Syrup of Buckthorn.

Take of the clarify'd Juice of ripe Buckthorn-berries, three Quarts; brown Sugar, four Pounds; and boil them over a gentle Fire to a Syrup; and, whilst it is warm, mix therewith a Dram of the distill'd Oil of Cloves, received upon a little Sugar. *E.*

Let Syrup of Buckthorn be made in whatever Manner, it will always have a very disagreeable Taste; so that it is no great Matter whether coarse or fine Sugar is used. It is a brisk Cathartic, and is particularly esteem'd for purging off the Water in a Dropsy; and is often added to laxative Decoctions, Infusions, and Solutions, in order to quicken their Operation. The Dose is an Ounce, or more, if given alone.

Syrupus à Symphyto.

Syrup of Comfrey.

Take the fresh Roots of the greater Comfrey, and the fresh Leaves of Plantain, of each half a Pound: Bruise them together, and strongly press out their Juice: Upon the Pressing pour a Quart of Spring-water, and boil it to the Consumption of one Half; then strain off the Liquor, and mix it with the express'd Juice: Add thereto an equal Weight of white Sugar, and boil them to the Consistence of a Syrup. *E.*

This Syrup is intended as a gentle Astringent and Vulnerary.

Syrupus Violarum.

Syrup of Violets.

Take of Violets, fresh and well colour'd, two Pounds; of boiling Water, five Pints. Steep the Flowers a whole Day in a Glass or earthen Vessel glazed; then pour off the Liquor, and strain it thro' a fine Linnen Cloth, with Caution not to press at all the Flowers. Afterwards with a proper Quantity of double refined Sugar make it into a Syrup. *L.*

This Syrup is of very little Consequence in Medicine, and therefore it is not much Matter how it is made, tho' it is much recommended by some. See the Article *Viola* in the *Materia Medica.*

Syrupus Zingiberis.

Syrup of Ginger.

Take of Ginger sliced thin, four Ounces; of boiling Water, three Pints. Let the Ginger steep some Hours, and strain off the Liquor; to which add the proper Quantity of double refined Sugar to make a Syrup. *L.*

This is a very agreeable Syrup. The Virtues may be learn'd from those of Ginger.

Of Honies, Jellies, and Juices.

Mel Ægyptiacum.

Ægyptian Honey.

Take of Verdigris powder'd very fine, five Ounces; of Honey, the Weight of fourteen Ounces; of Vinegar, the Measure of seven Ounces. Boil all together over a gentle Fire, till the Mixture acquire a proper Consistence and reddish Colour. After a Time a grosser Part will subside from this Mixture, the upper and more liquid

quid Part of which is call'd the
Egyptian Honey. L.

The Uses of this are entirely external. It serves to cleanse and deterge Ulcers, and keep down fungous Flesh.

The *Unguentum Egyptiacum* of the *Edinburgh Dispensatory* is much the same as this.

Mel Elatines.

Honey of Fluellin.

Take of the depurated Juice of Female Fluellin, four Pints; of clarified Honey, four Pounds. Boil them together to a proper Consistence. L.

I have never known this used in any Intention whatever. The Virtues may be learn'd from those of the *Veronica Fœmina*.

Mel Helleboratum.

Honey of Hellebore.

Take of the Roots of white Hellebore dried and sliced, one Pound; of clarified Honey, three Pounds; of Water, four Pints. After steeping the Roots three Days in the Water, boil them a little while; then boil the Liquor, well press'd out and strain'd, with the Honey to a due Consistence. L.

This partakes pretty strongly of the Virtues of the white Hellebore, and may be given in Maniacal Cases. I have known it excite very violent Efforts to vomit, when added to Clysters, in which it may sometimes be a proper Ingredient.

Mel Mercuriale.

Honey of Mercury.

Take of the Juice of Mercury and Honey, each three Pounds; and boil them together, clearing away the Scum as it rises, to the Consistence of a Honey. E.

This is principally used as an Emollient in Clysters.

Mel Rosaceum.

Honey of Roses.

Take of red Rose-buds quick dried, and their Heels cut off, four Ounces; of boiling Water, three Pints; of clarified Honey, five Pounds. Steep the Roses some Hours in Water; then to the strain'd Liquor add the Honey, and boil to a proper Consistence. L.

The *Mel Rosatum* of the *Edinburgh Dispensatory* differs very little from this. It is esteem'd a Detergent, and is principally used in Gargarisms for Ulcers and Inflammations of the Mouth and Fauces.

Mel Solutivum.

Solutive Honey.

Take the Decoction remaining after the Distillation of six Potinds of Damask Roses: Take also of Cummin-seed a little bruised, an Ounce; of coarse Sugar, four Pounds; of Honey, two Pounds. Boil the Decoction, press'd out, to three Pints; adding, towards the End, the Seeds tied up in a Cloth; then gently boil it, with the Sugar and Honey, into the Consistence of a liquid Honey. L.

This seems principally intended for Clysters, and is proper as an Addition to Decoctions for that Purpose.

Oxymel ex Allio.

Oxymel with Garlick.

Take of Garlick sliced, one Ounce and a half; Caraway-seeds, Sweet Fennel-seeds, of each two Drams; of clarified Honey, ten Ounces; of Vinegar, half a Pint. Boil the Vinegar a little while in a glazed earthen Vessel, with the Seeds bruised; then add the Garlick, and cover the Vessel. After all is cold, press out the Liquor, and with the Heat of a *Balneum* dissolve in it the Honey. L.

This

This is intended as a Pectoral and Expectorant, and may do Service in a Redundance of viscid Phlegm.

Oxymel Pectorale.

Pectoral Oxymel.

Take of the Roots of Elecampane, and Florentine Orrice, each Half an Ounce: Slice, bruise, and boil them in a Quart of Spring-Water, till it comes to a Pint and a Half: To the strain'd Liquor add of unprepar'd Gum Ammoniac, an Ounce, dissolved in four Ounces of Vinegar; add also eight Ounces of Honey; then boil them together, scum the Matter and strain it. *E.*

This promises fair to be an excellent Pectoral and Expectorant; and must therefore be very good in Asthmas and Coughs, and wherever a viscid Phlegm abounds.

Oxymel Scilliticum.

Oxymel of Squills.

Take of Honey, three Pounds; and of Vinegar of Squills, a Quart: Boil them together to a Syrup; observing to scum it during the Operation. *E.*

This is directed exactly in the same Manner, in the *London Dispensatory*.

This is an Emetic, if exhibited in a large Dose, and is a very good Expectorant. But it is more frequently given in small Doses, two or three Drams, for Example, and corrected with strong Cinnamon Water, and some Pectoral Syrup, in Order to prevent the *Nausea* which it would otherwise excite.

Oxymel Simplex.

Simple Oxymel.

Take of Honey, two Pounds; Vinegar, a Pint; and boil them toge-

ther according to the Rules of Art.

This is exactly the same in the *London Dispensatory*. It is of considerable Use as a Pectoral and Expectorant, and is very properly added to resolvent Cataplasms, when the Intention is to discuss inflammatory Tumors.

Of JELLIES.

Gelatina Berberorum.

Jelly of Barberries.

Take of Barberries with their Stalks pick'd off, white Sugar, each a Pound. Boil with a gentle Heat to a due Consistence, and pass it thro' *Hippocrates's* Sleeve. *E.*

This is a very agreeable cooling Acid, and very proper to moisten the Mouth and Fauces, in febrile Diseases; or to be drank, dissolv'd in warm Water.

Gelatina Cornu Cervi.

Jelly of Hartshorn.

Take of the Shavings of Hartshorn, half a Pound; Spring Water, three Quarts: Boil them over a gentle Fire, in a glaz'd earthen Vessel, till one Half is wasted; then strain off the Liquor, and add thereto six Ounces of white Sugar-Candy in Powder; four Ounces of *Spanish* White Wine, and an Ounce of Orange or Lemon-Juice; after which, with a gentle Fire, boil all together to a thin Jelly. *E.*

This relates more to Cookery than Physic. The Uses may be learn'd from those of Hartshorn.

Gelatina seu Miva Cydoniorum.

Jelly of Quinces, or Quince Mar-malade.

Take of the clarify'd Juice of Quince, three Pints; white Sugar,
A a a gar,

gar, a Pound; and boil them up to a Jelly, according to Art. *E.*

This is an Astringent, and is sometimes given in Diarrhoeas and Dysenteries. But is more frequently employ'd in giving Consistence to a Bolus.

Gelatina Ribesiorum.

Jelly of Currants.

This is made of the Juice of Currants, in the same Manner as the Jelly of Barberries. *E.*

This is very cooling and agreeable, and of more Consequence in Medicine than is generally imagin'd. It is frequently given in febrile Heats, without any farther View than to cool the Mouth and Fauces. But dissolv'd in warm Water, or Ptisan, it is an admirable saponaceous and resolvent Medicine. And, farther, many Chronical Distempers may be cur'd by a copious and long continu'd Use of Jelly of Currants; for after a long Use it will excite a *Diarrhoea* of so salutary a Kind, that the Distemper will be reliev'd eminently, or totally cur'd. *Boerhaave* remarks that it acts just like the saponaceous Juices of the Spring Grass, which in some Time will purge a surfeited Horse, after it has resolv'd the Obstructions which cause the Distemper. And then the Horse grows fat, sleek, and healthful.

OF JUICES.

Succus Glycyrrhizæ.

Take any Quantity of Liquorice Root; bruise it, and pour thereon as much boiling Spring Water as will float three Inches above it: Digest for three Days; and, after a little Boiling, press out the Liquor, and evaporate it, with a gentle Heat, to a proper Consistence. *E.*

The Virtues of this may be known from those of Liquorice.

Succus Prunorum Sylvestrium, seu Acacia Germanica.

The Juice of Sloes, or the German Acacia.

Take any Quantity of the Juice of unripe Sloes, and exhale it to a due Consistence, over a gentle Fire. *E.*

This, as it is an Astringent, may be properly us'd, whenever the whole Habit, or any particular Part, is too much relax'd. The Dose is, according to *Boerhaave*, from six Grains to a Dram and Half.

Succi Antiscorbutici.

Juices against the Scurvy.

Take of the Juice of Garden Scurvy Grass, that of Brook-lime, that of Water Cresses, and that of Seville Oranges, each a Pint; and of white Sugar, ten Ounces: Mix them together, and clarify them, according to the Rules of Art, and then add of compound Horse Radish Water, half a Pint.

In the *London Dispensatory* it is thus directed:

Take of the Juice of Garden Scurvy Grass, a Quart; the Juice of Brook-lime and of Water Cresses, each a Pint; of the Juice of Seville Oranges, a Pint and a Quarter. These being mix'd, let them stand till the Dregs subside; then let the Juice be pour'd off clear and strain'd.

The Title expresses the Uses. If given to any Purpose, they should be taken twice or thrice a Day in large Quantities, and be long continu'd.

Rob Baccarum Sambuci.

Rob of Elder-Berries.

Let the depurated Juice of Elder-Berries be inspissated with a gentle Heat to a proper Consistence. *L.*

The

The *Edinburgh* Dispensatory directs this to be made by evaporating four Pounds of the Juice of ripe Elder Berries, with Half a Pound of Sugar; but it is esteem'd better without the Sugar. This is not so much attended to in regular Practice as it deserves to be. There is not a better Medicine in a common Cold; if a Spoonful is taken at Bed-time dissolv'd in Half a Pint of Water. What has been said of Jelly of Currants is also applicable to this; but this is of much greater Efficacy, and more extensive Use; being highly saponaceous, resolvent, and antiseptic.

Elaterium.

Slit ripe wild Cucumbers, and pass the Juice, very gently pressed out, through a very fine hair Sieve into a glazed Vessel; set it by some Hours, till its thicker Part shall have subsided: Then, pour off as much of the thin Part of the Juice, as can conveniently be done, by inclining the Vessel, and draw away the rest by the Filtre: Let the thicker Part, which remains, be covered over with a linen Cloth, and dried either in the Sun or by a gentle Fire. *L.*

This is an excessively violent Cathartic and Hydrogogue, and is but seldom prescrib'd, because it operates so very powerfully: I have never known above five Grains given for a Dose, tho' some Authors mention a much larger. Its Use should be principally confin'd to Apoplexies and Lethargies, arising from a Redundance of Serum, and where milder Cathartics will not operate with Effect. It is a Medicine of very great Antiquity, for *Theophrastus* relates that he saw some two hundred Years old in the Possession of a Physician. Mr. *Boulduc* made a Kind of *Elaterium*, which should seem to be preferable to this, and

milder, by drying the wild Cucumber very well, and reducing it, together with its Seeds, to a Powder, which he found a very good Hydragogue.

PRESERVES, CONSERVES, and SUGARS.

From the *Edinburgh* Dispensatory.

Preserved Angelica.

Take any Quantity of fresh Angelica Root, cut it to Pieces, take out the Pith, and steep it, for two Days, in proper Parcels of Spring Water, which are to be once or twice renewed. After this, let them boil a little; then pour off the Water; and add as much Syrup of Sugar as will rise two Inches above them. In a Day or two, boil them again gently, if there be Occasion, to exhale the superfluous Moisture; so as that the Syrup may remain of its due Consistence.

And after the same, or a similar Manner, the following Simples may be preserved, viz. the Roots of Eryngo, Elecampane, *Satyrium*, *Scorzonera*, and the greater Confound; as also the Peels of Oranges, Citrons, and Lemons.

Nutmegs and Ginger are brought to us ready preserved from *India*.

All Kinds of Fruit, Flowers, and Seeds are likewise preserved; either by means of a Syrup, or crusting them over with Sugar: But the Confectioner's Art can hardly be admitted a Part of Pharmacy.

Iron also is a Subject of this Operation.

Mars Saccharatus.

Candied Iron.

Take any Quantity of clean Filings of Iron, unprepared; throw them into a brass Kettle, hung over a very gentle Fire; and, by Degrees, pour to them twice their own

Weight of Sugar, boil'd to the Consistence of Candy: Keep the Kettle in constant Motion, so as that the Filings may be cruſted over with the Sugar; Care being had to prevent their Running into Lumps.

Conserves of the Leaves of *Roman Wormwood*.

Garden Scurvy Graſs.
Wood Sorrel.

Mint.

Rue.

of the Flowers of *Rosemary*.

Mallows.

Betony.

Red Roses.

of the yellow Part of *Orange Peel*.
of Hips.

Conserves may be made of any of these Subjects, according to the Rules of Art; they being juſt clear'd of their Stalks, Fibres, or the like, and bruised to a Pulp; then adding, by Degrees, during the Operation, thrice their own Quantity of white Sugar. But for the more juicy Simples, twice their Quantity of Sugar will suffice: And the Pulp of Hips requires a much less Proportion.

From the *London Dispensatory*.

Conserves of the Leaves of *Garden Scurvy Graſs*.

Spear-Mint.

Rue,

Wood-Sorrel.

Of the Tops of *Sea Wormwood*.

Of the Flowers of *Lavender*,

Mallows,

Rosemary,

Red Roses, while in Bud.

Of the external yellow Part of
Seville Orange Peel.

The Leaves are to be plucked from their Stalks, and the Flowers from their Calix's; the external Rind of the Orange Peel should be scraped off with a Rasp, or Grater; every one of them, when thus prepared, is

to be pounded in a Mortar with a wooden Pestle, first by itself, and then with the Addition of three times its Weight of double refined Sugar, till they are well incorporated together. L.

Conserve of Hips.

Take of the Pulp of ripe Hips, one Pound; of double refined Sugar, twenty Ounces; and mix them into a Conserve. L.

The principal Use of this is to give a Consistence to an Electuary, or Bolus.

Conserve of Sloes.

Scald the Sloes in Water to soften them, taking Care, their Skins are not broken; then take them out, and express their Pulp, which mix with thrice its Weight of double refined Sugar. L.

The Virtues of this may be learn'd from those of Sloes.

Candied Eryngo-Root.

Boil the Roots, till the Rind will easily peel off: When peel'd, slit them through the Middle, and the Pith being taken out, wash them three or four times in cold Water. Then take, for every Pound of Roots so prepared, two Pounds of double refined Sugar; dissolve the Sugar in Water, set it over a Fire, and, as soon as it begins to boil, put in the Roots, and continue the Boiling, till they become soft.

In the same Manner *Angelica Stalks* are candied.

Candied Orange Peel.

Soke the fresh Peels of *Seville Oranges* in Water, and change it often, till the Peels lose all Bitterness; then boil them with double refined Sugar, dissolved in Water, till they become soft and transparent.

Lemon-peel is likewise to be candied in the same Manner.

The Virtues of these may be learn'd from those of Orange and Lemon Peel. They are of very little Use Medicinally.

SUGARS.

Saccharum Hordeatum, seu Penidiatum.
Barley Sugar.

This is made of white Sugar, boiled with Barley Water, till it acquires such a ductile Consistence, as that it may be drawn out, and fashioned with the Hands, into twisted Sticks, like Ropes. *E.*

This comes more properly under the Cognizance of the Confectioner than the Physician; and is too trifling to deserve any farther Remark.

Saccharum Rosarum Rubrum.
Red Sugar of Roses.

Take of white Sugar, a Pound; and of the Juice of red Roses, four Ounces; boil them together, over a gentle Fire, till the Juice is almost totally exhaled; then throw in an Ounce of the fine Powder of dried red Roses; and after this pour the whole upon a Marble, and form it into Lozenges, according to Art. *E.*

This is directed in a different Manner in the *London Dispensatory*, under the Title of

Saccharum Rosaceum.
Sugar of Roses.

Take of red Rose Buds, quick dried, and their white Heels cut off, one Ounce; of double refined Sugar, one Pound. Reduce the Roses and Sugar to Powder separately, then mix them, and with a little Water form Lozenges, to be dried with a gentle Heat.

These Preparations are somewhat astringent, but of too little Consequence to deserve farther Notice.

Tabellæ Diatragacanthi.
Lozenges of the Powder of Gum Tragacanth.

Take of white Sugar, a Pound; and of Rose Water, four Ounces; make a Solution over a gentle Fire; then add of the compound Powder of Gum Tragacanth, three Ounces; after which throw the whole upon a Marble, and fashion it into Lozenges. *E.*

The Virtues of this may be learn'd from those of Gum Tragacanth, if it has any worth Notice.

C H A P. VIII.

Of POWDERS.

GENERAL RULES for making of POWDERS.

I. Particular Care must be had, that nothing rotten, decay'd, or impure, be mixed along with Powders; besides which, the Stalks and all the corrupted Parts of Plants are to be first pick'd out, and thrown away.

II. When dry Spices are powder'd, they should be sprinkled with a few Drops of some proper Water.

III. The moister Aromatics should be dried with a very gentle Heat, before they are reduced to Powder.

IV. Gums, and the other Things that grind with Difficulty, are to be mixed with the drier Ingredients; so as to pass the Sieve together.

V. Powders should be made only in small Quantities; and ought to be kept in well stop'd Glasses.

Pulvis Antiepilepticus, de Gutteta dictus.
Powder against the Falling-Sickness.

Take of the Roots of white Dittany, Piony, wild Valerian, and Mistletoe, each equal Parts. Mix and make a Powder. *E.*

A a a 3

This

This is so readily made *extempore*, that it should not seem necessary to make it a Shop Medicine; particularly because it is best when fresh made. It is, however, well enough calculated for the Intention its Title expresses.

The *Pulvis ad Guttetam* in the former London Dispensatory stood thus:

Take of white Dittany, Mistletoe of the Oak, Contrayerva, *Virginia* Snake Root, and Male Piony-Roots; of the Male Piony-Seeds, of burnt Hartshorn, and Elk's-Hoof, of each two Drams; of wild Valerian Root, an Ounce; of red Coral, and human Skull, of each three Drams; of Jacinth Stone, a Dram; of Occidental Bezoar, a Dram and a half; of the Oriental, a Scruple; mix them into a Powder; to which may be added, at Pleasure, of Musk five Grains, and of the Leaves of beaten Gold, thirty.

Pulvis Epilepticus niger.

The black epileptic Powder.

Take of the *Talus*, or Ankle Bone of a Hare, and of Ivory, both calcin'd to Blackness, each five Drams; of the Roots of Swallow-Wort, Piony, and Valerian; of Hartshorn calcin'd without Fire, red Coral prepar'd, Elk's Hoof, Amber prepar'd, *Muscovy* Glass calcin'd, each a Dram and half; of the Shells of Oysters prepar'd without Fire, two Drams; of the Herb *Carduus Benedictus*, and the Seeds of Columbine, each a Dram; Extract of wild Poppies, a Dram and half; depurated Salt of Amber, and Salt of Hartshorn, each a Scruple; the Oils of Mace and Chamomile, each fifteen Grains. Mix and make a fine Powder.

This Medicine is much esteem'd in Germany for the Epilepsy, and all

Spasmodic, Hysteric, and Hypochondriac Disorders; the Colic from Flatulencies, Gripings, and the internal or blind Piles; and, farther, in the Worms, and Crudities in the intestinal Tubes of Children. It should be always given fresh prepar'd, because the principal Part of its Efficacy depends upon the black, empyreumatical Oil, contain'd in the Ingredients thus prepared, which loses its Virtue with Keeping. Dr. *Linden*, in a Pamphlet wrote upon the Subject of this Powder, recommends, as a great Improvement, the Substitution of certain Bones found within the Cranium of a Hog, calcin'd in such a Manner as to preserve the black Oil. See the Article *Porcus*, in the *Materia Medica*.

I have a very great Objection to these Medicines calculated against an Epilepsy, on Account of the Number of their Ingredients, and indeed against all others which are much compounded. For if one Ingredient is better than another, why should the Efficacy of that be impair'd, by adding one more insignificant. Thus in the *Pulvis Epilepticus* of the *Edinburgh* Dispensatory, if the Valerian is better than the Dittany, Piony, or Mistletoe, I see no Reason why that should not be used alone without the others. The full Dose is said to be a Scruple, which should seem to be too little to answer any good Purpose.

Pulvis Antilyssus.

Powder against the Bite of a mad Dog.

Take of Ash-colour'd ground Liver Wort, two Ounces; of black Pepper, one Ounce. Beat them together into a Powder. *L.*

This is the celebrated Remedy for the Bite of a mad Dog, and has the Reputation of preventing its Effects. I have never yet known it experienc'd in Man, except where other Methods

Methods have been try'd at the same Time; so that it was not possible to know to what to ascribe the Cure. But I have frequently known it given to Dogs, and not often with Success. I have also been well inform'd; that a Man near *Smithfield*, another at *Northampton*, and another at *Bury St. Edmunds*, all took this Medicine from the first, with the utmost Caution and Regularity, and yet all dy'd mad. It was originally taken Notice of by *Dampier*, the celebrated Traveller, and was publish'd many Years ago by Sir *Hans Sloane* in the Philosophical Transactions.

Pulvis Ari compositus.

Compound Powder of Cuckowpint.

Take of the Root of Cuckowpint, fresh dried, two Ounces; the Root of the yellow Water Flag, the Root of burnt Saxifrage, of each one Ounce; prepared Crabs Eyes, Cinnamon, of each half an Ounce, of Salt of Wormwood, two Drams. Let all be beat into a Powder, which must be kept in a very y close Vessel. *L.*

It is best to give this Medicine fresh made, because the *Arum* or Cuckowpint Root spoils by Keeping. It is esteem'd good in the cold Scurvy. But Practitioners should be very cautious in the Use of hot Antiscorbutics; because a continu'd Use of them will dry the Liver, so as to render it almost friable; and hence Jaundice, Dropsy, and Death; which are often ascrib'd to the Distemper, tho' more generally the Effects of the Medicines thus injudiciously taken.

Pulvis Bezoardicus.

Bezoardic Powder.

Take of the compound Powder of Crabs Claws, a Pound; of Oriental Bezoar prepared, an Ounce. Make them altogether into a Powder. *L.*

In former Dispensatories, the *Bezoar* was an Ingredient in the *Gascoign's Powder*, or *Pulvis à Chelis Cancrorum compositus*. But in the last Dispensatory the College have directed it without Bezoar, and have order'd this for those who have an Opinion of the *Bezoar*. This was once a Medicine much in Use, and given in almost every Fever; but is at present pretty much out of Fashion, for so I must call it, because nothing but Fashion could support the Credit of so insignificant and trifling a Medicine, in which the Bezoar is of as little Consequence as any of the other Ingredients. It is, however, of some Service to the Compounder, because, when used, it is generally repeated every three or four Hours. The Medicine which seems to bid fair for succeeding this in Practice, is *Raleigh's Cordial*, which tho' it answers the End of the Compounder as well, or perhaps better, is I am afraid not so innocent with Respect to the Patient.

Pulvis à Bolo compositus sine Opio.

Compound Powder of Bole without Opium.

Take of *Armenian Bole*, or of *French Bole*, half a Pound; of Cinnamon, four Ounces, Tormentil Root, Gum Arabic, of each three Ounces; of long Pepper, half an Ounce. Make them into a Powder. *L.*

This is intended as an Astringent.

Pulvis à Bolo compositus cum Opio.

Compound Powder of Bole with Opium.

Take of Opium strain'd three Drams, then let it be a little dried; that it may be commodiously reduced to Powder; and add it to the Species of the preceding Composition, before they are pulveriz'd, that they may be all beat together into a Powder. *L.*

This is like the preceding, an Astringent, and more powerful for restraining Fluxes of all Kinds, on Account of the *Opium*. I don't know what Service the long Pepper can be of, in either.

Pulvis Cephalicus.

Cephalic Powder.

Take of the Leaves of Asarabacca, Betony, and Marjoram, each equal Quantities. Mix and make a Powder. *E.*

A Powder much like this is directed in the *London Dispensatory*, under the Title of

Pulvis Sternutatorius.

Sneezing Powder.

Take the dried Leaves of Asarabacca, of Marjoram, of Syrian Mastick, Thyme dried, Lavender Flowers, of each an equal Weight, and rub all into a Powder. *L.*

Both these are intended as Errhines, to clear the *Membrana Pituitaria*, and by the convulsive Motion of Sneezing, and the subsequent Discharge, to relieve the Head.

Pulvis à Cerussa compositus.

Compound Powder of Cerusse.

Take of Cerusse five Ounces, of Sarcocol an Ounce and a half, of Gum Tragacanth half an Ounce. Make all into a Powder. *L.*

This is substituted for the *Trochisci albi Rhasis*. It is entirely for external Use. It is said to be good in Inflammations, and to repel hot corrosive Humours; and it is us'd in Collyrijs, Injections, and Lotions.

Pulvis à Chelis Cancrorum compositus.

Compound Powder of Crabs Claws.

Take of the Tips of Crabs Claws prepared, one Pound; prepared Pearls, red Coral prepared, of each three Ounces. Mix all together. *L.*

See the Remarks on the *Pulvis Bezoardicus* above.

In the *Edinburgh Dispensatory* it is thus directed:

Take of Crabs Eyes, and red Coral, of each an Ounce; the black Tips of Crabs Claws, two Ounces. Mix and make a Powder.

I think both these not at all improv'd by leaving out the Amber; but even with that they are too trifling to deserve a serious Remark. They can only act as Absorbents, which most of the Testacea singly will do as well.

Pulvis Contrayervæ compositus.

Compound Powder of Contrayerva.

Take of the compound Powder of Crabs Claws, a Pound and a half; of Contrayerva Root, five Ounces. Make them into a Powder. *L.*

I am far from thinking this Medicine any Improvement on the *Pulvis à Chelis Cancrorum compositus*. The best Character that can be given of the last is, that 'tis innocent; but the Contrayerva, in this, renders it dangerous, and in many Cases of fatal Consequence; because it increases Heat, when there was before too much; and may excite a symptomatical Sweat, which is always prejudicial, instead of one that is critical and salutary. It may, however, be of some Use, to continue or promote a critical *Diaphoresis*, when Nature has shewn the Necessity for it, by exciting it spontaneously. But in all Cases we should be ascertain'd that the Sweat is critical, before we attempt to increase or continue it; and then there is seldom any Occasion for such Helps. This Medicine may be of Service in relax'd Habits, abounding with an Acid in the *Primæ Viæ*. But, whenever there is any extraordinary Heat, it should be used with Caution.

tion. It answers very well the lucrative Views of the Compounder, because 'tis generally very frequently repeated.

In the *Edinburgh Dispensatory*, the *Pulvis Contrayervæ compositus* stands thus:

Take of Contrayerva Root, half an Ounce; of *Virginian Snake Root*, a Dram and half; Cochineal, one Dram; *English Saffron*, half a Dram; of *Armenian Bole*, three Drams; of the compound Powder of Crabs Claws, seven Drams. Make a Powder.

Pulvis Cornachini.

Cornachine Powder.

Take of Diaphoretic Antimony, Cream of Tartar, and Scammony, each a like Quantity; and make thereof a Powder. E.

This and the *Pulvis Comitiss Warwickensis* only differ in the Proportion of the Ingredients to each other. The latter is directed with two Ounces of sulphurated Scammony, one Ounce of Diaphoretic Antimony, and half an Ounce of the Crystals of Tartar. In other Dispensatories, also, the Proportion of the Ingredients in the *Pulvis Cornachini* differs from that in this. I esteem it one of the best Shop Cathartics we have. But the Prescriber may extemporaneously alter the Proportion of the Ingredients, according to the different Intentions he has in View. Thus, if he intends it should act principally upon the Stomach and Intestines, the Proportion of the Scammony should be large. 'Tis very probable that the Crystals or Cream of Tartar may open the Scammony, be impregnated with some of its Virtues, convey them into the Blood, and thus make them operate in the Urinary Passages. When, therefore, the Prescriber intends that the Medicine should act

in this Manner, he will do well to increase the Proportion of the Cream or Crystals of Tartar. Experience has taught me, that Diaphoretic Antimony is not the inert Calx it is now fashionable to represent it. On the contrary, it will operate powerfully, and with great Effect, if judiciously administer'd. In the present Case, 'tis not unlikely, that the Diaphoretic Antimony may open the Scammony more than the Crystals of Tartar could do, and lead it thus open'd into the most remote Series of Vessels and Glands, where it may do more Service than in the intestinal Tube. But, Reasoning apart, I know for certain, that not only this Medicine, but many other Cathartics, operate very differently, and with very different Effects, when mix'd with Diaphoretic Antimony, from what they do without it.

Pulvis à Scammonio compositus.

Compound Powder of Scammony.

Take of Scammony, five Ounces; of burnt Hartshorn prepared, three Ounces. Grind them carefully together into a Powder. L.

This is substituted in the Room of the *Pulvis Cornachini*. But I apprehend the Omission of the Cream or Crystals of Tartar, and Diaphoretic Antimony, to be no Advantage to the Medicine, for Reasons given in the Notes to the *Pulvis Cornachini*.

Pulvis Diaromaton.

The Powder of Aromatics.

Take of Canella Alba, or wild Cinnamon; of the Lesser Cardamoms, Mace, and Ginger, each equal Parts. Mix and make a Powder.

This is added in the last Edition of the *Edinburgh Dispensatory*, where it seems to be substituted for the *Species Diambrae*, or *Pulvis Diambrae*.

bra. It seems a very good aromatic, cordial, stomachic Powder.

In the *London Dispensatory* it is thus directed under the Title of

Species Aromaticæ.

Aromatic Species.

Take of Cinnamon, two Ounces; the Lesser Cardamom-seeds, freed from their Husks, Ginger, Long Pepper, of each one Ounce. Make all into a Powder, by beating them together. *L.*

Pulvis Diasennæ.

Compound Powder of Senna.

Take of the Leaves of Senna, and Cream of Tartar, each two Ounces; of Scammony and Ginger, each half an Ounce: Make them into a Powder. *E.*

This is a Cathartic; but not very necessary for a Shop Medicine, as something of the same Kind may be easily prescrib'd extemporaneously. In the *London Dispensatory* it is thus directed, under the Title of

Pulvis à Sena compositus.

Compound Powder of Sena.

Take Leaves of Sena, Crystals of Tartar, of each two Ounces; of Scammony, half an Ounce; Cloves, Cinnamon, Ginger, of each two Drams. Powder the Scammony by itself, the rest altogether, and then mix them. *L.*

Pulvis Diatessaron.

Powder of four Ingredients.

Take of the Roots of Round Birthwort and Gentian, of Bay-berries and Myrrh, each two Ounces: Make them into a Powder; whereof, by the Addition of two Ounces of Ivory Shavings, is made the

Pulvis Diapente; or,

Powder of five Ingredients. *E.*

Vegetius, in his *Mulomedicina*, pre-

scribes this as a Medicine of Consequence in the Diseases of Cattle. I never knew it used for Man.

Pulvis Diatragacanthi frigidus.

The compound, cooling Powder of Gum Tragacanth.

Take of Gum Tragacanth, an Ounce; Gum Arabic, five Drams; Starch, Liquorice, white Poppy-seed, of each two Drams; and the Root of Marshmallows, half an Ounce: Make them into a Powder. *E.*

This is a cooling and agglutinating Medicine, and is given when there is a considerable Acrimony of the Humours, in Stranguries, Coughs, and sometimes in Hæmics; but is a Composition of no great Consequence.

In the *London Dispensatory* it stands thus, under the Title of

Pulvis à Tragacantha compositus.

Compound Powder of Gum Tragacanth.

Take of Gum Tragacanth, Gum Arabic, Marshmallow Roots, of each an Ounce and a half; Starch, Liquorice, of each half an Ounce; of double refined Sugar, three Ounces. Reduce all together into a Powder. *L.*

The Difference betwixt these two is not of Consequence enough to deserve a Remark.

Pulvis Hieræ Picræ.

Powder of Hiera Picra.

Take of *Succotrine Aloes*, four Ounces; the Lesser Cardamoms, and *Virginia Snake-root*, of each half an Ounce: Mix them, and make into a Powder.

When the *Hiera Picra* is made for the Sake of the Tincture, the Aloes only need be pulverized, and the other Ingredients well bruised. *E.*

In

In the former *London Dispensatory* it stood thus, under the Title of

Species Hiera Picra.

Take of Cinnamon, Zedoary, Asarum, the Lesser Cardamom-seeds, and Saffron, of each six Drams; Cochineal, a Scruple; of the best Aloes, twelve Ounces; and let them all be made into a Powder together.

Hiera Picra.

Hiera Picra.

Take of the Gum extracted from Succotrine Aloes, one Pound; of wild Cinnamon-bark, three Ounces, Powder them separately, and then mix them. *L.*

Experience alone must determine whether this is better than the *Species Hiera Picra* of the last *London Dispensatory*; or whether the Compilers of the present have been more studious of Elegance and Taste than of Efficacy, in this Composition.

Pulvis à Myrrha compositus.

Compound Powder of Myrrh.

Take of the dried Leaves of Rue, Dittany of Crete, Myrrh, of each an Ounce and a half; Asa Fœtida, Sagapenum, *Russia* Castor, Opoponax, of each an Ounce. Beat all together into a Powder. *L.*

This is substituted for the *Trochisci de Myrrha*, and is excellent for promoting the Uterine Discharges, and the Expulsion of the Fœtus.

Pulvis ad Partum.

Powder to promote Delivery.

Take of Borax, half an Ounce; Castor and Saffron, of each a Dram and a half: Mix them, and make a Powder; to which add of the distill'd Oil of Cinnamon, eight Drops; and of the distill'd Oil of Amber, six Drops; and mix all together. *E.*

This is excellent for promoting De-

livery, where forcing Medicines are proper, and no Hæmorrhage is apprehended.

Pulvis Stypticus.

Styptic Powder.

Take of Roche Alum, half an Ounce; and of Dragon's Blood, two Drams, Mix them into a Powder. *E.*

This is said to be invented by *Helvetius*. It is a most excellent Styptic, and inferior to nothing in checking too copious Discharges of the Menfes, or other Hæmorrhages. It may properly enough be taken with Tincture of Roses.

Pulvis à Succino compositus.

Compound Powder of Amber.

Take prepared Amber, Gum Arabic, of each ten Drams; Juice of the Rape of Cistus, Balauitines, Japan Earth, of each five Drams; of Olibanum, half an Ounce; of strain'd Opium, a Dram. Reduce all into a Powder. *L.*

This is substituted for the *Trochisci de Carabe* of former Dispensatories, and seems intended for an Astringent, principally to check Fluxes; but is of no great Use.

Pulvis Vermifugus.

Worm-Powder.

Take of the Leaves of the Female Southernwood, of the Flowers of Tansey, and of Worm-seed and Coralline, each half an Ounce; Mix and make them into a Powder; whereto add of the distill'd Oils of Rue and Savin, received upon a little Sugar, each twenty Drops; and mix all together. *E.*

The Title of this Medicine expresses its Uses.

Species à Scordio sine Opio.

Species of Scordium, or Water Germander, without Opium.

Take of Bole Armenic, or of French Bole, four Ounces; of Scordium,

or Water-Germander, two Ounces; of Cinnamon, an Ounce and a half; Storax strain'd, Roots of Tormentil, Bistort, Gentian, Leaves of Dittany of Crete, Galbanum strain'd, Gum Arabic, Red Roses, of each one Ounce; Long Pepper, Ginger, of each half an Ounce. Beat all into a Powder. L.

This is substituted for the *Species* for the *Confectio Fracastorii*, the Opium being omitted, as the whole Composition might have been, without any Disadvantage to the Practice of Physic. For it was originally, and still continues to be, a very unimportant Medicine, capable of answering no one Intention, which might not be provided for much better by extemporaneous Prescription. It is intended as a Restricting.

Species è Scordio cum Opio.

Species of Scordium, or Water-Germander with Opium.

Take of strain'd Opium, three Drams;

and add this to the former Species while they are pounding together, it being first a little dried, that it may the more commodiously be beaten to Powder. L.

This is substituted for the *Dioscordium*, or *Confectio Fracastorii*. I have never yet known this used. But with Respect to the *Dioscordium*, a Medicine very much in Practice, I have never yet seen any good Effects from it, but what might have been expected from the Opium alone; and I think Opium a much better Medicine without any Addition. I must confess, that this seems to be a better Medicine than the *Dioscordium*; but nothing can be a more melancholy Proof of the wretched and uncertain State of Physic, than not only to see such insignificant and unmeaning Compositions in all the European Dispensatories; but also to hear them mentioned with some Degree of Veneration.

CHAP. IX.

Of Electuaries, Confections, Antidotes, &c.

GENERAL RULES for making ELECTUARIES.

I. THE Rules, laid down for making Decoctions and Powders, must also be understood to regard the Decoctions and Powders of Electuaries.

II. The Gums, inspissated Juices, and other Ingredients that are not pulverisable, must be dissolved in the Liquor prescribed; the Powders being put in by Degrees, and the Whole briskly stirr'd together, so as to make a smooth and uniform Mixture.

III. Astringent Electuaries, and those wherein the Pulp of Fruits is an Ingredient, are to be made up in small Quantities; the superfluous Moisture of such Pulps being exhaled over a gentle Fire, before they are mix'd in with the rest.

Confectio Alkermes.

Confection of Alkermes.

Take of the Syrup of Kermes, three Pounds; and evaporate it, with a gentle Heat, to the Consistence of Honey; then add to it the following Ingredients, reduced to very fine Powder;

Powder; Cinnamon, and Yellow Saunders, each six Drams; Cochineal, three Drams; Saffron, a Dram and a half; and mix them together. *E.*

This is directed in a different Manner in the *London Dispensatory*, thus:

Take of the Juice of Kermes, warm'd and strain'd, three Pounds; of Damask Rose-water, six Ounces in Measure; of Oil of Cinnamon, half a Scruple; of double refin'd Sugar, one Pound. Melt the Sugar, by a Bath-heat, into a Syrup with the Rose-water; then add the Kermes-juice, and, after it is cold, the Oil of Cinnamon. *L.*

This is a very agreeable and reviving Cordial, and will answer much better Purposes than Cardiac Waters, without any of their bad Consequences. It is principally used in making up Boles; but may be employ'd for much better Purposes.

Confectio Cardiaca.

The Cordial Confection.

Take fresh Rosemary-tops, Juniper-berries, of each a Pound; the Lesser Cardamom-seeds, freed from their Husks, Zedoary, Saffron, of each half a Pound: Draw a Tincture with about a Gallon and a half of Proof Spirit. Reduce, by a gentle Heat, this Tincture strain'd nearly to the Weight of two Pounds and a half; then finish the Electuary by adding the following Species, very finely powder'd, *viz.* of the compound Powder of Crab-claws, sixteen Ounces; Cinnamon, Nutmeg, of each two Ounces; of Cloves, an Ounce; of double refined Sugar, two Pounds. *L.*

This is substituted for the celebrated Confection of Sir *Walter Raleigh*, or rather is this Confection reduced nearer the original Receipt of the Author. It is at present a Medicine much in Vogue as a Cordial, and is attended with much less Inconve-

nience than Drams. But I must confess I have not been so fortunate as ever to have seen any Effects from it, sufficient to make it worth Preparing, or even Mentioning, unless it be to give some Cautions with respect to its Use. In debauch'd Constitutions, those vitiated by Spirituous Liquors, or relax'd by Accident or Chronical Diseases, and abounding with Acidities and Flatulences, it may be of Service, as a cordial warming Balsamic. But where-ever the Fibres are too rigid, the Heat too intense, and the Humours are inclined to an alkaline Putrefaction, all which happens in most acute Diseases, this Medicine must be extremely prejudicial, as it increases the Heat, Rigidity, and Tendency to Putrefaction; however, it may give a little present Relief, by raising the Spirits and warming the Stomach; and if it raises a Sweat, before the offending Humours are, in the Phrase of *Hippocrates*, concocted, or, in other Words, sufficiently attenuated, and disposed to pass thro' the cutaneous Pores, it must do Mischief in Proportion to the Degree of Sweat it excites, and the Quantity of the fine diluting Lymph it expels. And, when this Attenuation or Concoction is brought about, such Helps as this Medicine will afford are not wanting to complete a Cure. *Hippocrates*, the Prince of Physicians, never advises the Use of heating Medicines in the Cure of acute Distempers. *Sydenham*, the modern *Hippocrates*, learn'd from Observation the bad Effects of such Remedies; and *Boerhaave* absolutely rejected them in such Cases. But, had they all approved them, I could not have so far distrusted my own Sense as to submit to their Opinion; for I have met with Cases where Patients have, in all Appearance, been much relieved by Evacuations; but upon the Repetition of a few Doses of this very Medicine, or something of the same Nature, the Heat has been

been violently increased, the Tongue has grown black, and a Delirium has come on, succeeded by Death, whilst the Patient has all the Time sweated profusely at every Pore. I am sensible that heating Medicines were originally brought into Practice by the Chymical Physicians; and a false Theory; but I am inclined to believe that Artifice has had a great Share in their Introduction, and Custom and Inattention have continued them; for their Use undoubtedly renders more Medicines, and more Attendance necessary than any other Method, and protracts a Fever, which would, in all Probability, terminate in a few Days, to almost as many Weeks. If Men were Statues, such Treatment would be only wicked; but when rational Creature, endued with Sensibility, are designedly tortured by such a Prostitution of Science, Language is too barren to represent such Conduct in its proper Colours.

Confectio Paulina.

The Confection called Paulina.

Take Costus, or in its stead Zedoary, Cinnamon, Long Pepper, Black Pepper, strain'd Galbanum, strain'd Opium, *Russia* Castor, of each two Ounces; of the simple Syrup, boiled to the Consistence of Honey, an equal Weight to thrice the Species. Mix carefully the Opium, first dissolved in Wine, with the Syrup warm'd; then to the Storax and Galbanum, melted together, add by Degrees the Syrup, while it remains warm. Afterwards sprinkle in the other Species reduced to Powder. *L.*

This Medicine is the *Confectio Arabigenis*, brought back nearly to the Form it is found in, and the Name it is call'd by, *Galen*. It is a very warm Opiate, but should seem to be

a very trifling Composition, of but little Use in Practice.

Electuarium Antidysentericum.

Electuary against a Dysentery.

Take of Dioscordium, two Ounces; of the Balsam of *Lucatellus*, one Ounce. Mix into an Electuary.

As there are many better Medicines for a Dysentery, this does not seem of much Consequence. It may, however, be of some Service when it is proper to check a Diarrhœa, or Dysentery, which requires great Judgment to determine. These Distempers are of great Emolument to the Venders of Medicines; for when stopp'd, without removing the Cause, they will certainly return at Intervals for Years, and perhaps for ever, and require more Medicines at every Return, without End.

Electuarium à Baccis Lauri.

The Electuary of Bay-berries.

Take of the Conservè of Rue, two Ounces; preserved Ginger, one Ounce; Bay-berries, half an Ounce; Zedoary, two Drams; *Russian* Castor, one Dram; Chymical Oil of Fennel, ten Drops; Syrup of Orange-peel, a sufficient Quantity to make an Electuary. *E.*

This is principally used as a Carminative in Clysters, in order to expel Flatulencies.

In the *London* Dispensatory it stands thus:

Electuarium à Baccis Lauri.

Electuary of Bay-berries.

Take the Leaves of Rue dried, Caraway-seeds, Common Parsley-seeds, Bay-berries, of each an Ounce; of Sagapenum, half an Ounce; Black Pepper, *Russia* Castor, of each two Drams; of clarified Honey, thrice the Weight of the Species, when powder'd. Mix

Mix the Species with the Honey into an Electuary. *L.*

Electuarium Cardiacum.

The Cordial Electuary.

Take of the Conserve of Rosemary, and of red Roses, each an Ounce and a half; candied Orange-peel, and Nutmeg, of each an Ounce; preserved Ginger, six Drams; Confection of Alkermes, half an Ounce; the distill'd Oil of Cinnamon, twenty Drops; and Syrup of Cloves, enough to make the Whole into an Electuary, according to the Rules of Art. *E.*

The Remarks made upon the *Confectio Cardiaca* are equally proper with respect to this Composition; but this seems preferable to that celebrated Medicine.

Electuarium à Casia.

Electuary of Casia.

Take the solutive Syrup of Roses, the Pulp of Casia fresh extracted, of each half a Pound; of Manna two Ounces; of the Pulp of Tamarinds, one Ounce. Rub the Manna in a Mortar, and with a gentle Heat dissolve it in the Syrup; then add the Pulps, and, the Heat being continued, reduce the Whole to a proper Consistence. *L.*

The *Edinburgh* Dispensatory has a Composition not unlike this, under the Title of

Diacaissia.

Take of *Casia Fistularis*, twelve Ounces; of Tamarinds, six Ounces; of *Calabrian* Manna, eight Ounces; Syrup of pale Roses, one Pound. Dissolve the Manna in hot Water, and strain it; then evaporate it together with the Syrup, to the Consistence of Honey, and afterwards mix in the Pulps, and make an Electuary.

Both these are gentle Purges, but very unmeaning Compositions, and

what might be very well omitted, because the Ingredients are so readily mix'd extemporaneously.

Diascordium.

Take the Leaves of Scordium, red Roses, Cinnamon, Bole Armoniac, and *Japan* Earth, of each an Ounce; the Roots of Bistort, Gentian, and Tormentil; the Leaves of *Cretan* Dittany, Gum Arabic, *Storax Calamita*, and Galbanum, of each half an Ounce; long Pepper and Ginger, of each two Drams; Opium, a Dram and a half; Syrup of Diacodium, boil'd to the Consistence of Honey, thrice the Weight of all the Powders; Canary Wine, half a Pint: Mix them together, so as to make an Electuary according to the Rules of Art. *E.*

This is directed thus in the *London* Dispensatory, under the Title of

Electarium à Scordio.

Electary of Scordium, or Water Germander.

Take any Quantity of the Species of Scordium, or Water Germander with Opium, and thrice their Weight of Diacodium, boiled to the Thickness of Honey. Mix the Species with the Syrup into an Electuary. *L.*

See the Remarks upon the *Species à Scordio*. With Respect to the Change of *Diocodium* instead of Honey, it may be much doubted whether this is an Improvement or not. Honey by its Fermentation induces a great Alteration in the Ingredients of this Composition, and probably renders the Opium a better Medicine. It is a Detergent, and possess'd of very considerable Virtues, to those who can bear it, which some cannot. I have long esteem'd the *Diascordium*, as 'tis generally us'd, a very pernicious, and often dangerous Medicine.

cine. But 'tis less so with the Honey than with *Diacodium*. For Honey renders it less narcotic and astringent; and somewhat detergent; whereas *Diacodium* makes it more narcotic and astringent. Upon the Whole, this Composition seems very insignificant; for if it is meant as an Astringent, less complex and more efficacious Medicines may be contrived extemporaneously; if as an Opiate, crude Opium without any Addition will answer better Purposes, under the Management of the Judicious, and is less nauseous to the Patient. But a false Theory, and Inattention to Experience, has supported the Character of this, as well as many other Medicines equally trifling.

Electuarium Lenitivum.

Lenitive Electuary.

Take of dried Figs one Pound; and of the Leaves of Sena eight Ounces; the Pulps of Tamarinds, of Cassia, and of French Prunes, of each half a Pound; of Coriander Seeds, four Ounces; of Liquorice three Ounces; of double refin'd Sugar, two Pounds and a half. Reduce the Sena with the Coriander Seed to Powder, and separate by the Sieve ten Ounces; boil the rest with the Figs and Liquorice in two Quarts of Water, till it is boiled half away, then strain and press it out; let the strained Liquor be evaporated, to the Weight of a Pound and a half, or a little less; afterwards add the Sugar to make a Syrup; this Sugar mix gradually with the Pulps; and lastly stir in the Powder before separated by the Sieve. L.

In the *Edinburgh Dispensatory* it stands thus, under the Title of *Electuarium Lenitivum pro Clystere.*

Lenitive Electuary for Clysters.

Take of the Root of Polypody of the Oak, two Ounces; the Leaves

of Mercury, Fœnugreek Seed, and Linseed, of each an Ounce; Spring Water three Quarts: Boil them together till one half is exhaled; adding, towards the End of the Operation, two Ounces of Sena Leaves, and half an Ounce of Coriander Seed; then press out the Liquor, and put to it two Pounds of Honey; boil it to the Consistence of a thick Syrup, and add thereto a Pound of the Pulp of *Damascus* Prunes; and half a Pound of the Pulp of *Cassia fistularis*; and make all together into an Electuary. E.

These purge very gently, and are convenient enough to add in Clysters. Internally they are more proper to prevent Costiveness, than to be exhibited as regular Purges. But I don't know any End they can serve, which Manna alone will not answer. The College have thought fit to change the commonly receiv'd Name of *Electuarium* for that of *Electarium*, for Reasons too trifling with Respect to the Practice of Physic, to enquire into.

Mithridatium sive Confectio Damocratis.

Mithridate, or *Damocrates's* Confection.

Take of Cinnamon fourteen Drams, of Myrrh eleven Drams, Agaric, Spikenard, Ginger, Saffron, Seeds of Treacle Mustard, or of *Mithridate* Mustard, Frankincense, Chio Turpentine, of each ten Drams; Camels Hay, Costus, or in its Stead Zedoary, Indian Leaf, or in its Stead Mace, French Lavender, long Pepper, Seeds of Hartwort, Juice of the Rape of Cistus, strained Storax, Opponax, strained Galbanum, Balsam of Gilead, or in its Stead, expressed Oil of Nutmegs, *Russia* Castor, of each an Ounce, Poley Mountain, Water Germander, the Fruit of the

the Balsam Tree, or in its Stead Cubebs, white Pepper, Seeds of the *Daucus* of *Crete*, *Bdellium* strained, of each seven Drams; *Celtic* Nard, Gentian Root, Leaves of Dittany of *Crete*, red Roses, Seeds of *Macedonian* Parsley, the lesser Cardamom Seeds, freed from their Husks, sweet Fennel, Gum Arabic, Opium strained, of each five Drams; Root of the sweet Flag, Root of wild Valerian, Aniseed, Sagapenum strained, of each three Drams; Spignel, Saint John's Wort, Juice of *Acacia*, or in its Stead *Japon* Earth, the Belies of Scinks, of each two Drams and a half; of clarified Honey thrice the Weight of all the rest. Dissolve the Opium first in a little Wine, and then mix it with the Honey made hot; in the mean Time, melt together, in another Vessel, the Galbanum, Storax, Turpentine, and the Balsam of *Gilead*, or the expressed Oil of Nutmeg, continually stirring them round that they may not burn, and as soon as these are melted, add to them the hot Honey, first by Spoonfuls, and afterwards more freely; lastly when this Mixture is near cold add by Degrees the rest of the Species reduced to Powder. L.

This celebrated Medicine stands thus directed in the *Edinburgh* Dispensatory, under the Title of

Mithridatium Damocratis.

Mithridate of Damocrates.

Take of Myrrh, Saffron, Agaric, Ginger, Cinnamon, Spikenard, Male Frankincense, and the Seeds of Treacle Mustard, each ten Drams; those of Hartwort, Opobalsamum (or Blsam of *Peru*) Squinanth, Flowers of *Arabian* Stœchas, Costus (or Zedoary) Galbanum, *Cyprus* Turpentine, long Pepper, Castor, Hypo-

cistis, *Storax Calamita*, *Opo-*ponax, and *Indian* Leaf, of each an Ounce; *Cassia Lignea*, Poley Mountain, white Pepper, Leaves of Scordium, Seeds of *Cretan* *Daucus*, *Carpobalsamum* (or Cubebs) Troches of *Cyperus*, and *Bdellium*, of each seven Drams; *Celtic* Spikenard, Gum Arabic, *Macedonian* Parsley Seed, Opium, the lesser Cardamoms, Fennel Seed, Gentian Root, red Roses, and Dittany of *Crete*, of each five Drams; Aniseed, the Roots of *Asarabacca*, *Acorus verus*, Phu, (or wild Valerian) and Sagapenum, of each three Drams; the Root of Spignel, true *Acacia* (or the the *German*) the Belly Part of Scinks, and the Seed of St. John's Wort, of each two Drams and a half; of clarified Honey, thrice the Weight of all the Powders; and *Canary* Wine, enough to dissolve the Gums and Juices: Mix all together, and make an Electuary, according to the Rules of Art. E.

I only insert these out of Deference to the Compilers of the *London* and *Edinburgh* Dispensatories. But could have wish'd that they had been left out of both; for it is a Reproach to Physic, to see such unmeaning and random Compositions in Dispensatories, which have the Sanction of public Authority, after all the boasted Improvements in Anatomy, and the Theory and Practice of Medicine. Such Remedies, if it were proper to call them so, can answer no one Intention, which may not be better provided for by a more scientific Combination of some few of their Ingredients; and this would render the Art of healing less ridiculous to Men of Sense and Knowledge, tho' less mysterious to the Ignorant and Unattentive.

*Theriaca Andromachi.**Venice Treacle.*

Take of the Troches of Squills half a Pound; long Pepper, Opium strained, dried Vipers, of each three Ounces; Cinnamon, Balsam of Gilead, or in its Stead expressed Oil of Nutmegs, of each two Ounces; Agaric, the Roots of Florentine Orrice, Water Germander, red Roses, Seeds of Navew, Extract of Liquorice, of each an Ounce and a half; Spikenard, Saffron, Amomum, Myrrh, Costus, or in its stead Zedoary, Camels Hay, of each an Ounce; the Root of Cinquefoil, Rhubarb, Ginger, Indian Leaf, or in its stead Mace, Leaves of Dittany of Crete, of Horehound, and of Calamint, French Lavender, black Pepper, Seeds of Macedonian Parsley, Olibanum, Chio Turpentine, Root of wild Valerian, of each six Drams; Gentian Root, Celtic Nard, Spignel, Leaves of Poley Mountain, of St. John's Wort, of Ground Pine, Tops of creeping Germander, with the the Seed, the Fruit of the Balsam Tree, or in its stead Cubebs, Aniseed, sweet Fennel Seed, the lesser Cardamom Seeds freed from their Husks, Seed of Bishops Weed, of Hartwort, of Treacle Mustard, or Mithridate Mustard, Juice of the Rape of Cistus, Acacia, or in its stead Japon Earth, Gum Arabic, Storax strained, Sagapenum strained, Lemnian Earth, or in its stead Bole Armenic, or French Bole, green Vitriol calcin'd, of each half an Ounce; Root of creeping Birthwort, Tops of the lesser Centaury, Seeds of the Daucus of Crete, Opoponax, Galbanum strained, Russia Castor, Jews Pitch, or in its stead white Amber prepared, Root of the sweet Flag,

of each two Drams; of clarified Honey, thrice the Weight of all the rest. The Ingredients are to be mixed in the same Manner as in the *Mithridate*. L.

In the *Edinburgh Dispensatory* it stands thus:

Take of the Troches of Squills, six Ounces; those of Vipers, the Mass *Hedychroon*, long Pepper, and Opium, of each three Ounces; *Slavonian* (or *Florentine*) Orrice Root, red Roses, the Leaves of Scordium, Agaric, *Opobalsamum*, (or Balsam of Peru) Juice of Liquorice, the Seeds of Navew, and Cinnamon, of each an Ounce and half; Myrrh, Saffron, Ginger, Rapontic (or Tormentil Root) Cinquefoil Root, the Leaves of Calamint, Horehound, *Cretan* Dittany, the Flowers of *Arabian* Stœchas, Squinanth, *Macedonian* Parsley Seed, Costus (or Zedoary) Cyprus Turpentine, Male Frankincense, white Pepper, black Pepper, *Cassia Lignea*, and *Indian* Spikenard, of each six Drams; *Cretan* Poley Mountain; Seeds of the Hartwort of *Marseilles* (or the common) those of Anise, of Bishops Weed, of *Amomum*, (or Cloves) of the lesser Cardamoms, of Fennel, and of Treacle Mustard; the Roots of Gentian, of Spignel, of *Pontic* Phu (or wild Valerian) and of sweet Flag; the Leaves of Germander, Ground Pine, and St. John's Wort; true Acacia, or the *German*, *Carpobalsamum*, or Cubebs, *Lemnian* Earth, or Bole Armeniac, calcined Brass Stone, or *Roman* Vitriol, *Storax* *Calamita*, Gum Arabic, the Juice of *Hypocistis*, Celtic Spikenard, and *Indian* Leaf, of each half an Ounce; Tops of the lesser Centaury, the Seed of *Cretan* Daucus, small, or long, Birthwort Root; *Jews* Pitch, or Amber, Galbanum, Opo-

Opoponax, Sagapenum, and Castor, of each two Drams; of clarified Honey, thrice the Weight of the Powders; and as much Canary Wine as will serve to dissolve the Gums and Juices: Mix all together, and make an Electuary thereof, according to the Rules of Art. E.

Quincey is very diffuse in his Remarks upon this capital Medicine of the Shops. The principal Effects I have ever seen from its Use, have been such as any one might reasonably have expected, from an Opiate united with heating Ingredients, and exhibited where they were sure to do Mischief, that is, to convert a Cold, or slight febrile Disorder, into a dangerous Inflammation. Quincey would, therefore, have been highly ungrateful, if he had not spoke well of a Medicine, which brings in its Consequences yearly to the Apothecaries many thousand Pounds, and something to the Physicians, who are usually called in when the Case is irrecoverable, and are complimented with a few Guineas, and the Reproach of the Miscarriage. What I have said with respect to *Mithridate* will hold equally true of this Composition. *Raleigh's Cordial* at present seems to have supplanted *Venice Treacle*; and it must be confess'd it is less prejudicial, as having no Opium in it.

Theriaca Edinensis.

The *Edinburgh Treacle*.

Take of the Roots of *Virginian Snake Root*, six Ounces; the Root of wild *Valerian*, and *Contrayerva*, each four Ounces; of the *Pulvis Diaromaton*, three Ounces; Refin of *Guaiacum*, *Russian Castor* and *Myrrh*, each two Ounces; *English Saffron*, and *Opium*, each an Ounce; of clarified Honey, thrice the Weight

of the Powders, and as much *Canary Wine*, as will serve to dissolve the *Opium*: Mix all together, and make an Electuary thereof according to the Rules of Art. E.

Camphire may be occasionally added.

This is better calculated to answer the End of an Alexipharmic, than the *Venice Treacle*. But, perhaps, is not for that Reason a less dangerous Medicine.

Electuarium Pectorale.

Pectoral Electuary.

Take of the Conserve of *Roses*, two Ounces; of the compound Powder of *Gum Tragacanth*, half an Ounce; *Flowers of Benjamin* a Dram; *balsamic Syrup* a sufficient Quantity, to make an Electuary.

The Title of this Medicine expresses its Uses.

Electarium à Scammonio.

Electary of Scammony.

Take of *Scammony* an Ounce and a half; *Cloves*, *Ginger*, of each six Drams; of the essential Oil of *Caraway Seeds*, half a Dram; of *Honey*, half a Pound. Reduce the *Scammony* to Powder by itself, mix the Aromatics, fresh pounded together, with the *Honey*, then add the *Scammony*, and in the last Place the Oil. L.

This is substituted for the *Caryocostinum* of former Dispensatories, and is so contriv'd, that a Dram and half of this contains as much *Scammony*, as half an Ounce of the former, which renders it more commodious for taking. It is a brisk Purge, and may be taken either by the Mouth, or in Clysters. The particular Virtues may be learn'd from those of *Scammony*.

Philonium Londinense.

The London Philonium.

Take white Pepper, Ginger, Caraway Seeds, of each two Ounces; of Opium strained, six Drams; of Diacodion boiled to the Consistence of Honey, thrice the the Weight of all the rest. Mix carefully the Opium dissolved first in Wine, with the Syrup warmed, and then add the other Species reduced to Powder. *L.*

This is a very warm Opiate; but I am persuaded it will in very few Cases answer better than crude Opium.

N. B. All Electuaries, if they grow dry, should be reduced again to their Consistence with a small Quantity of *Canary*, and not with Syrup, or Honey: By this Means the Dose will be rendered the least uncertain; which is especially necessary in those, that are made up with Syrup, and contain a large Quantity of Opium, such as the *Philonium*, and the *Confectio Paulina*. The Reason for this Caution is, that the Quantity of the fresh Syrup, or Honey, will be so great, as to vary the Proportion of the whole to the original Ingredients, and make the Effect of the Medicine precarious.

LOHOCHS.

Lohoch ex Amylo.

Lohoch of Starch.

Take of Starch two Drams; *Japan Earth* one Dram; Syrup of Comfrey, and the White of Eggs, beat to a Liquor, of each an Ounce: Mix them together, and make a Lohoch. *E.*

This is intended as a gentle Astringent; and may be of Service in some Sorts of Coughs and Asperities of

the Fauces. But a Lohoch is not a very convenient Form for Medicines, and is almost out of Use. And besides, I apprehend, that all Medicines, which can readily be made extemporaneously, are not proper for Shop Compositions; because they may, by the Judicious, be better suited to any Case that occurs, by Prescription; and Directing them, in officinal Dispensatories, serves only to indulge the Laziness of some, and Ignorance of others.

Lohoch commune.

The common Lohoch.

Take of fresh Oil of sweet Almonds, and of Pectoral or Balsamic Syrup, each an Ounce; white Sugar two Drams: Mix and make a Lohoch. *E.*

This may possibly mitigate a Cough, but cannot be much depended on.

Lohoch Diatragacanthi.

Lohoch, with the compound Powder of Gum Dragon.

Take of the compound Powder of Gum Tragacanth two Drams; of *Japan Earth* one Dram; of the White of Eggs, beat up, an Ounce; Syrup of Diacodion, two Ounces: Mix them together into a Lohoch. *E.*

This is also of some Use in a Cough, when excited by a Discharge of thin Rheum.

Lohoch de Lino.

Lohoch of Linseed Oil.

Take of fresh Linseed Oil, and of Balsamic Syrup, each an Ounce; Flowers of Sulphur, a Dram; white Sugar, two Drams; mix them together so as to make a Lohoch. *E.*

This seems to be the best of these Lohochs; but I believe the fresh drawn Linseed Oil would do as well by itself.

Loboch de Manna.

Lohoch of Manna.

Take of *Calabrian Manna*, of fresh drawn Oil of Almonds, and of Syrup of Violets, each a like Quantity: Mix, and make a Lohoch. E.

Loboch Saponaceum.

Lohoch of Soap.

Take of *Alicant Soap*, a Dram; Oil of Almonds, an Ounce; of Pectoral or Balsamic Syrup, an Ounce and a half; and make thereof a Lohoch, according to Art. E.

Loboch de Spermate Ceti.

Lohoch of Sperma Ceti.

Take of *Sperma Ceti*, two Drams: Rub it with a sufficient Quantity of the Yolk of an Egg; and add of recent Oil of sweet Almonds, half an Ounce; of Balsamic Syrup, an Ounce. Mix, and make a Lohoch.

This and the two preceding do not seem of any great Consequence; for all the Simples which enter their Composition may be given more agreeably, and with better Effect.

C H A P. X.

Of PILLS.

GENERAL RULES for making of PILLS.

I. THE three first Rules, laid down for the making of Powders, are to be carefully observed in the making of Pills.

II. The Gums and inspissated Juices must be first softened by means of the Liquor prescribed; then the Powders are to be added gradually; and lastly, a perfect Mixture is to be made of the Whole, by repeated Beating in a Mortar.

III. All Masses of Pills should be kept in Bladders oiled, or moistened in the Liquor the Mass is made up with.

*Pilulae Aethiopicae.**Aethiopic Pills.*

Take of pure Quicksilver, the golden Sulphur of Antimony, and Refin of Guaiacum, each half an Ounce:

Rub them together in a glass Mortar till the Mercury is perfectly extinguished; and then add of *Alicant Soap*, half an Ounce; of Balsamic Syrup, a sufficient Quantity to make a Mass for Pills. E.

I must confess I have not often known this used; but am certain it must be a most excellent Remedy for many Chronical Distempers. I should expect it to have very great Effects in the Rheumatism, to do considerable Service in the Gout, and to exert great Efficacy in the Cure of cutaneous Diseases, from the Itch to the Leprosy; and I scarcely know a better Medicine than this promises to be in venereal Disorders. 'Tis thro' a Neglect of the Use of such Medicines, that Physicians frequently fail of curing obstinate Distempers, and thus bring Quackery into Vogue; for the World is wise enough to judge by Success; and if Quacks perform a Cure where Physicians

miscarry, the general Application will be to the latter. It is trifling to insinuate, that such Remedies are unsafe; for, in the Hands of the Judicious, they are attended with as little Danger as more unmeaning and less efficacious Medicines.

Pilula Mercuriales.

Pills of Mercury.

Take of Quicksilver, five Drams; of *Straßbourg* Turpentine, two Drams; of the Cathartic Extract, four Scruples; of Rhubarb, in Powder, one Dram. First grind the Quicksilver with the Turpentine, till it appear no longer; then beat them up with the rest into a Mass. If the Turpentine chance to be too thick, it is to be thinn'd with a little Olive Oil. *L.*

This seems directed in Imitation of *Belloste's* Pill, and is, like the preceding, capable of doing great Service in Chronical Cases. In this Manner an almost infinite Number of Compositions may be contrived extemporaneously to suit any particular Case or Constitution, by combining Quicksilver, properly divided, with cathartic Ingredients. But I am well inform'd, that the Pills sent from abroad under the Name of *Belloste's*, are not now the same either in Appearance or Efficacy, with those brought over from *Belloste*, when this Remedy began first to be celebrated.

In the *Edinburgh* Dispensatory the *Pilula Mercuriales* are thus directed:

Take of pure Quicksilver, an Ounce; Honey, a sufficient Quantity: Rub them in a Glass Mortar till the Globules of Mercury disappear; then add of Gum Ammoniac, two Ounces; and make into a Mass for Pills. *E.*

This seems to be a very good Mer-

curial Alterative, and as such may be of considerable Use in Practice.

Pilula Mercuriales laxantes.

Laxative Mercurial Pills.

Take of pure Quicksilver, an Ounce; of Honey, a sufficient Quantity; Rub them together till the Mercury is perfectly divided; and then add of Gum Ammoniac, the Extract of black Hellebore, and choice Rhubarb, each half an Ounce. *E.*

Quicksilver thus divided, without some Cathartic Ingredient, will be subject to affect the Mouth; this, therefore, seems well contrived to prevent it, and may be used with very good Effect in Chronical Distempers.

Pilula Aromatica.

Aromatic Pills.

Take of Succotrine Aloes, an Ounce and a half; of Gum Guaiacum, an Ounce; the Aromatic Species, Balsam of *Peru*, of each half an Ounce: Let the Aloes and Gum Guaiacum be powder'd separately; then mix'd with the rest, and form into a Mass with the Syrup of Orange-peel. *L.*

These are made in Imitation of the *Pilula Diambra*, and *Pilula Aloephagina*. It is a warm Cathartic, and may agree very well with debauch'd Stomachs.

Pilula Coccia.

Pills called Coccia.

Take of Succotrine Aloes, Colocynth, and of Scammony, each an Ounce; of vitriolated Tartar, two Drams; of the distill'd Oil of Cloves, a Dram; and with Syrup of Buckthorn, enough for that Purpose, bring them into a Mass for Pills. *E.*

In former Dispensatories there were
two

two Sorts of these Pills, the *Pilulæ Cochix majores*, and *Pilulæ Cochix minores*. These are the *Cochix minores*, with the Addition of vitriolated Tartar, to keep them from exciting Gripes. They are of very little Use, and work pretty roughly. When Purging briskly is intended, Jalap-root, or some more brisk Cathartic, will answer better than this.

In the *London Dispensatory* they stand thus, under the Title of

Pilulæ ex Colocynthide cum Aloe.

Pills of Coloquintida, with Aloes.

Take Succotrine Aloes, and Scammony, of each two Ounces; of the Pith of Coloquintida, one Ounce; of Oil of Cloves, two Drams: Let the dry Species be reduced to Powder separately, the Oil mix'd among them, and the Whole form'd into a Mass, with Syrup of Buckthorn. *L.*

Pilulæ de Duobus.

Pills of two Ingredients.

Take of Colocynth, and Scammony, each an Ounce; of vitriolated Tartar, two Drams; of the distill'd Oil of Cloves, a Dram; and with a suitable Quantity of Syrup of Buckthorn bring them into a Mass for Pills, according to the Rules of Art. *E.*

This was much the same in the preceding *London Dispensatory*, except that the Oil of Cloves was only in the Quantity of half a Dram; and in this the vitriolated Tartar is added, to keep the Cathartic Ingredients from adhering to the Intestines, and exciting Gripes. In the last *London Dispensatory* the Name of this Composition is changed, and stands thus, under the Title of

Pilulæ ex Colocynthide simpliciores.

The more simple Pills of Coloquintida.

Take the Pith of Coloquintida,

Scammony, of each two Ounces; of Oil of Cloves, two Drams: Let the dry Species be reduced to Powder separately, the Oil be mixed with them, and the Whole be formed into a Mass with Syrup of Buckthorn. *L.*

I believe this Name now given this Composition, is neither better nor worse than the preceding, so that it deserves no Notice. It is of more Consequence to remark, that the *Pilulæ ex Duobus* have been very much in Use as a strong Cathartic, and frequently employ'd in the Cure of a virulent Gonorrhœa; but they operate too roughly, and frequently bring on a *Hernia Humoralis*, or Swelling of the Testicles; or leave an incurable Gleet, to the great Prejudice of the Patient's Virility. Many young Gentlemen have also been brought into a Consumption by the too frequent Use of these Pills, for the Cure of a Venereal Disorder. And upon the Whole, as there are much better and safer Purges, I think this might very well be omitted, especially as extemporaneous Prescriptions may better answer any End that can be proposed.

Pilulæ Ecphrasticæ.

Deobstruent Pills.

Take of the *Aromatic Pill*, three Ounces; Rhubarb, Extract of Gentian, Salt of Iron, of each one Ounce; of Salt of Wormwood, half an Ounce. With the solutive Syrup of Roses, beat them diligently into a Mass. *L.*

This, as its Title imports, is a Deobstruent, and is useful in a *Chlorosis*, a Suppression of the Menfes, some Kinds of Cachexies, and many Chronical Diseases.

Pilulæ Ecphrasticæ cum Aculeo.

Stimulating Deobstruent Pills.

Take of Succotrine Aloes, the Ex-
tra

tract of black Hellebore; and Scammony, each an Ounce; of Gum Ammoniac, and Resin of Guaiacum, each half an Ounce; of vitriolated Tartar, two Drams; Chymical Oil of Juniper, a Dram; Syrup of Buckthorn, a sufficient Quantity to make a Mass for Pills.
E.

Pilulæ Ecephrætica Chalybeata:

Deobstruent Pills, with Steel.

Take of the *Pillulæ communes*, or *Rufus's Pills*, an Ounce and a half; Gum Ammoniac, and Resin of Guaiacum, each half an Ounce; Salt of Iron, five Drams; Elixir Proprietatis, a sufficient Quantity to make a Mass for Pills. *E.*

These are very well contrived for Deobstruents; but exert their Effects as such best, if taken in small Doses, as Alteratives.

Pilulæ Fœtidæ.

Fœtid Pills.

Take of Asa Fœtida, a Dram and a half; *Russian* Castor, a Dram; Camphire, half a Dram; distill'd Oil of Hartshorn, a sufficient Quantity: Beat them together into a Mass for Pills.

This is intended as an Antihysteric.

Pilulæ de Gambogia.

Pills of Gamboge.

Take of Succotrine Aloes, Extract of black Hellebore, Gamboge, and Calomel, each two Drams; Chymical Oil of Juniper, half a Dram; Syrup of Buckthorn, enough to make a Mass for Pills.
E.

I never knew this Medicine used; but it appears to me too rough, tho' corrected by the Oil of Juniper; and for that Reason of no great Use.

Pilulæ Gummosæ.

Gum Pills.

Take Galbanum, Opoponax, Myrrh, Sagapenum, of each an Ounce; of Asa Fœtida, half an Ounce: With the Syrup of Saffron make them into a Mass. *L.*

The *Pilulæ Gummosæ* of the *Edinburgh Dispensatory* are differently directed thus:

Take of Gum Ammoniac, and Sagapenum, each half an Ounce, *Russia* Castor and Myrrh, each three Drams; Asa Fœtida and Galbanum, each two Drams; distill'd Oil of Amber, half a Dram; and with a sufficient Quantity of *Elixir Proprietatis*, bring them by Art into a Mass. *E.*

Both these are intended as Antihysterics and Emmenagogues.

Pilulæ Pectorales.

Pectoral Pills.

Take of Gum Ammoniac, half an Ounce; Benjamin, three Drams; Myrrh, two Drams; *English* Saffron, one Dram; and with a sufficient Quantity of Balsam of Sulphur, made with Oil of Anniseeds, bring them into a Mass, according to Art. *E.*

The Title expresses the Design of this Pill.

Extractum Catharticum.

The Cathartic Extract.

Take of Succotrine Aloes, an Ounce and a half; of the Pith of Coloquintida, six Drams; Scammony, the lesser Cardamom-seeds husk'd, of each half an Ounce: of Proof Spirit, a Pint. The Spirit being poured upon the Coloquintida, cut small, and the Seeds bruised, draw a Tincture with a gentle Heat continued four Days; then to the Tincture, pressed out, add the Aloes and Scammony, first sepa-

separately reduced to Powder; and these being dissolved, draw off the Spirit, and reduce the Mass to the Consistence of a Pill. *L.*

This is substituted for the *Pilulæ Rudii*, which are thus directed in the *Edinburgh Dispensatory*.

Pilulæ, seu Extractum Rudii.

Pills, or Extract of *Rudius*.

Take of the Roots of black Hellebore and Colocynth, each two Ounces: Bruise them well, and add thereto two Quarts of Spring-water: Boil them to the Consumption of one Half; then press out the Liquor, and exhale it to the Consistence of Honey; afterwards put to it the following Ingredients, reduced to a very fine Powder, *viz.* of *Succotrine Aloes*, two Ounces; and of Scammony, an Ounce; lastly, having remov'd the Mass from the Fire, mix with it a Dram of the distill'd Oil of Cloves. *E.*

This Pill is a very good brisk Cathartic, and much in Use.

Pilulæ Rufi.

Rufus's Pills.

Take of *Succotrine Aloes*, two Ounces; Myrrh and Saffron, of each one Ounce: Make them into a Mass, with Syrup of Saffron. *L.*

This is directed in the *Edinburgh Dispensatory*, under the Title of *Pilulæ communes*, with only half an Ounce of Saffron, and to be made up with Syrup of Orange-peel. It is a most excellent Cathartic, and the most useful of any in the Shops, if taken in the Quantity of half a Dram; but it answers much better Purposes to take it at Night, or Night and Morning, as an Alterative, in less than one Fourth of the full Dose: For thus it improves the Appetite and Digestion, and, I am

pretty certain, exerts very considerable Virtues in the Blood and Juices.

Riverius directs a Pill, of which this is the Basis, under the Title of *Pilulæ contra Morbos deploratos*, and which I shall call

Pilulæ Riverii.

Riverius's Pills.

Take of Pill *Rufi*, two Drams; of Gum Guaiacum, and Diaphoretic Antimony, each one Dram; Elixir Proprietatis, a sufficient Quantity to make them into Pills.

Riverius extols these Pills very highly, and indeed they deserve considerable Encomiums. If twelve Pills are made of every Dram, and three are exhibited every Night and Morning, or at Night only, if they operate too much, they will do great Service in a Cachexy, Chlorosis, a Cough, Flatulences, and many Chronical Disorders. There is not a better Medicine for Women at the grand Period of Life, when the Catamenia begin to be irregular, or intirely cease, if duely persisted in.

Pilulæ Matthæi.

Matthew's Pills.

Take of the Extract of Opium, black Hellebore, Liquorice, and the Soap of Tartar, each four Ounces. Let the Hellebore and Liquorice be made into a subtile Powder: Beat and mix these four Ingredients very well; then, with two or three Ounces of this Mass, mix an Ounce of *English Saffron*, cut into small Pieces, and beat them well together, till the Saffron is perfectly incorporated with the Mass, so that no Part of it be discernible from the rest; then beat and mix that with the rest of the Mass as well. If this Mass be too dry, you may mix it with some of the Oil which comes from the Soap, which it spues out when it

it stands a long time by; or in its stead, so much rectified Oil of Turpentine as is sufficient to make a Mass fit to form into Pills; then put it into a wide-mouth'd Glass, or Gally-pot, tied over with a Bladder or Leather.

Quincy remarks, that there are many Ways of making this Medicine: *Bates* puts in white Hellebore. But how much soever it may be imagined to stand corrected here, it is much safer left out; and the Medicine will be still left efficacious enough to all the Intentions it is ordered for. The Saffron in this is not ordered by *Bates*, but much improves the Medicine. In many Cases it is an admirable and safe Opiate, and promotes the Discharges both by Sweat and Urine; and the Soap of Tartar is so aperient, that it makes it safe even in Asthmas, when no other Preparations of Opium dare be ventur'd upon. It may be given from three to ten Grains. When it grows dry with keeping, it must be again moistened with fresh Oil of Turpentine; but the oftener it has had those Amendments, its Dose may be enlarged; for the Turpentine will not dry away so much, as not to leave enough behind to give some Augmentation to its Bulk. So far *Quincy*. And this Medicine is really very well contrived for an aperient Opiate. I like the Soap of Tartar, the black Hellebore, and Saffron, and have many Reasons; reduced from Practice, to believe the Medicine much the better for them; tho', in general, Additions to Opium are either insignificant or prejudicial. This Medicine is seldom omitted in Nephritic Cases; and in many other Cases it may be given with good Effect, where other Preparations of Opium, or Opium itself, are not so safe.

Pilule Starkei.

Starkey's Pills.

Take Extract of Opium, four Ounces; Nutmegs, and Mineral Bezoar, each two Ounces; Saffron and *Virginia* Snake-root, each one Ounce. Beat the Nutmegs and Saffron together into a Paste, so that they cannot be distinguished from one another. Let all the Mineral Bezoar and Snake-root be in impalpable Powder; then mix all together, with half a Pound of the Soap of Tartar; of Oil of Sassafras, half an Ounce; and two Ounces of the Tincture of Antimony: Let them be all well incorporated, by beating in a Mortar; then keep them in a Glass, or Gally-pot, tied over with a Bladder and Leather, for Use.

This Mr. *George Wilson* says he had from Dr. *Starkey's* own Mouth, in the Year 1665, a little before his Death; who then told him, he gave *Matthews* the former for a little Money; but that was what he successfully made use of himself. It is both more diaphoretic and more anodyne than the former; and they who have made Use of it in their Practice, affirm it to be the best Laudanum they ever met with; and yet this is not the Sort which is kept in the Shops, and it is not by much in so constant Prescription as the former. Indeed there are hardly any of the Shops that prepare this; so that a Physician may write for it in vain, while the other is so ready for a Succedaneum.

This may be given in a good handsome Dose, and is not so hazardous in its Effects as common Opium, or any other of its Preparations.

Thus far *Quincy*: But I don't know that I ever either knew it made or used. It promises fair to be a very good Opiate. I don't think it the better

better for the warm Alexipharmics.

The *Edinburgh Dispensatory* directs *Matthews's Pills* thus, under the Title of

Pilula Pacifica, vulgò Matthæi.

Anodyne Pills, commonly called *Matthews's Pills*.

Take of *Russian Castor*, two Ounces; *English Saffron*, and *Opium*, each an Ounce; Soap of Tartar, three Ounces; Balsam of Capivi, a sufficient Quantity. Make a Mass for Pills.

I don't think the Addition of Castor, or the Omission of the Hellebore, any Improvement in this Medicine.

Pilula Saponacea.

Soap Pills.

Take of Almond Soap, four Ounces; of strain'd Opium, half an Ounce; of Essence of Lemons, a Dram: Beat the Opium, softened with a little Wine, along with the rest, till they are perfectly mix'd. L.

In the *London Dispensatory* this seems substituted for *Matthews's Pill*. Experience must determine whether it is better or worse; but I strongly suspect it is not better.

Pilula Scillitica.

Pills of Squills.

Take of *Alicant Soap*, one Ounce; Gum Ammoniac, prepared Millepedes, and fresh Squills, each half an Ounce; and as much Balsam of Capivi as will make them into Pills, according to the Rules of Art. E.

This seems intended as a Deobstruent and Diuretic, and to be a good Medicine in a Jaundice, Dropsy, and Cachexy.

Pilula Stomachica.

Stomach Pills.

Take of *Succotrine Aloes*, an Ounce; of Rhubarb, six Drams; of Gum Ammoniac, three Drams; of Myrrh, and Extract of Gentian, each two Drams; of Saffron and vitriolated Tartar, each one Dram; Chymical Oil of Mint, half a Dram; and, with a sufficient Quantity of Syrup of Sena and Rhubarb, make them into a Mass for Pills. E.

The Title of this expresses the Intention.

Pilula à Storace.

Storax Pills.

Take of strain'd Storax, two Ounces; of Saffron, one Ounce; of strain'd Opium, five Drams: Beat them diligently together, till they are perfectly mixed. L.

This is intended as a Pectoral Opiate, and is often given in a Cough, frequently mix'd with a gentle Cathartic,

In the *Edinburgh Dispensatory* it is thus directed:

Take of *Storax Calamita*, five Drams; of Gum Tragacanth, one Ounce; Olibanum, and Opium, each half an Ounce; and, with a sufficient Quantity of *Diacodium*, make them into a Mass, according to the Rules of Art. E.

C H A P. XI.

Of Troches.

GENERAL RULES for preparing
TROCHES.

I. **T**HE three preceding Rules, laid down for the making of Powders, must be likewise understood of the preparing Powders for Troches.

II. When the Mass is so glutinous as to stick to the Fingers, whilst the Troches are forming, let the Hands be rubb'd with sweet Oil, or any other of the Aromatic Tribe, or the Powder of Starch or Liquorice.

III. In order to the well-drying of them, let them be laid upon an inverted Sieve in a shady, but open airy Place, and keep them frequently turning.

IV. Let them be kept for Use in Vessels of Glas, or of glazed Earth.

Trochisci albi Rbasii, seu Sief album.

The white Troches of Rbasii.

Take of Ceruse, ten Drams; Sarcocol, three Drams; Starch, and Gum Tragacanth, of each two Drams; Camphire, half a Dram; and a proper Quantity of Rose-water; in which dissolve the Gum Arabic and Gum Tragacanth, so as to make a Mucilage; and, the other Ingredients being reduced to Powder, make Troches of the Whole, according to the Rules of Art. E.

The London Dispensatory substitutes the *Pulvis de Cerussa compositus* for this. 'Tis only for external Use, and is esteem'd an Antiphlogistic and Repellent.

Trochisci Bechici albi.

White Pectoral Troches.

Take of double refined Sugar, one Pound and a half; of Starch, an Ounce and a half; of Liquorice, six Drams; of Florentine Orris, half an Ounce. All the Ingredients being reduced to Powder, with the Mucilage of Gum Tragacanth, form Troches. L.

These Troches are intended for a Cough: They must be held in the Mouth, and suffer'd to dissolve gradually. In the *Edinburgh Dispensatory* they are thus directed:

Take of white Sugar-candy, a Pound and a half; Florentine Orris-root, an Ounce and a half; Liquorice-root, an Ounce; Starch, half an Ounce; Mucilage of Gum Tragacanth made with Rose-water, as much as will serve to form the Whole into Lozenges. E.

Trochisci Bechici nigri.

Black Pectoral Troches.

Take Extract of Liquorice, double refined Sugar, of each ten Ounces; of Gum Tragacanth, half a Pound. By moistening with Water, make Troches. L.

These are also intended for a Cough, but are of no great Consequence. In the *Edinburgh Dispensatory* they are thus order'd:

Take of the Juice of Liquorice, two Ounces; Balsam of Tolu, a Dram; of Gum Tragacanth, half an Ounce; of white Sugar, four Ounces;

Ounces; Hyssop-water, a sufficient Quantity to form Troches. E.

Trochisci Cyphæos, pro Mithridatio.

Troches of *Cyphis*, for Mithridate.

Take of the Pulp of stoned Raisins of the Sun, and *Cyprus* Turpentine, each three Ounces; Myrrh and Squinanth, of each an Ounce and a half; Cinnamon, half an Ounce; Saffron, a Dram; Bdelium, Spikenard, *Cassia Lignea*, round or (long) Cyperus-root, and Juniper-berries, of each three Drams; of *Rhodium*, (or Yellow Sanders) two Drams and a half; of *Calamus Aromaticus*, nine Drams; a little *Canary* Wine, and a sufficient Quantity of clarify'd Honey. Let the Bdelium and Myrrh be ground with the Wine to the Consistence of Honey; then add, by degrees, the Pulp of Raisins, the Turpentine, the Honey, and, lastly, the other Ingredients reduced to a very fine Powder; and so make them into Troches, according to the Rules of Art. E.

This is one of those insignificant Compositions that deserves no Notice.

Trochisci dicti Magma Hedychroi, pro Theriaca Andromachi.

Troches, call'd the Mass *Hedychroon*, for the *Theriaca*.

Take of the Leaves of Marum and Marjoram, of *Rhodium* (or Yellow Sanders) and of the Root of Asarabacca, of each two Drams; of Squinanth, *Calamus Aromaticus*, Pontic Phu (or the Root of wild Valerian) Xylobalsamum (or Aloes Wood) Opobalsamum (or Balsam of Peru) Costus (or Zedoary) and Cinnamon, each three Drams; of Myrrh, Indian Leaf (or Bay-leaves) Indian Spikenard, *Cassia Lignea*, and of Saffron, each

six Drams; of Amomum (or Cloves) an Ounce and a half; of Mastich, a Dram; and, with a requisite Proportion of *Canary* Wine, make them up into Troches according to Art. E.

This is a Composition of very little Consequence, and deserves no farther Remark.

Trochisci de Minio.

Troches of red Lead.

Take of red Lead, half an Ounce; corrosive Mercury Sublimate, an Ounce; Crums of white Bread, four Ounces; with a sufficient Quantity of Rose-water, form oblong Troches. E.

These are intended for an Escharotic; but must be used with great Caution.

Trochisci de Myrrha.

Troches of Myrrh.

Take of Myrrh, half an Ounce; of Madder-root, the Leaves of common Pennyroyal, *Russian* Castor, each three Drams; the Seeds of Cumin, Asa Foetida, and Galbanum, each two Drams; the distill'd Oils of Rue and Savine, of each twenty Drops; and a sufficient Quantity of *Elixir Proprietatis*: Let the Gums, by means of the Elixir, be reduced to a Mass of the Consistence of Honey: Afterwards add the Oils and Powders, so as that Troches may be artificially formed thereof. E.

This is intended for an Antihysterical, an Exciter of the Menses, and the Lochia. In the London Dispensatory the *Pulvis à Myrrha compositus* is substituted in the Room of these Troches.

Trochisci à Nitro.

Troches of Nitre.

Take of purified Nitre, four Ounces; of double refined Sugar, a Pound. Make

Make them into Troches with the Mucilage of Gum Trogacanth. *L.*

The Nitre here is a very good Ingredient; but this is not the best Form for its Exhibition.

Trochisci à Scilla.

Troches of Squills.

Take of baked Squills half a Pound, of Wheat Flower four Ounces.

Pound them together, and form them into Troches, to be dried with a gentle Heat. *L.*

This is of no Use that I know of except for the *Venice Treacle*.

In the *Edinburgh Dispensatory*, the Troches of Squills are thus ordered under the Title of

Trochisci Scillitici, pro Theriaca Andromachi.

Troches of Squills, for the Treacle of Andromachus.

Take an entire Squill, after the Leaves and Stalks are dry, and, having pull'd off its outside, include it in a Paste made of Wheat Flower, and bake it in an Oven till the Crust becomes hard: Then take three Ounces of the Squill thus baked tender, and grind it in a Mortar, adding thereto two Ounces of the Meal of the white Vetch, so as to make a Paste; whereof Troches being form'd, let them be dried in the Shade. *E.*

The mere Pulp of the Squill is justly preferred to these Troches.

Trochisci à Sulphure.

Troches of Sulphur.

Take washed Flowers of Sulphur, two Ounces; of double refined Sugar, four Ounces. Beat them together, and by gradually adding the Mucilage of Quince Seeds form Troches. *L.*

In the *Edinburgh Dispensatory*, something of the same Intention are directed under the Title of

Trochisci Diasulphuris.

Troches of Sulphur.

Take of the Flowers of Sulphur, an Ounce; the Flowers of Benjamin, a Dram; of white Sugar, four Ounces, and a sufficient Quantity of the Mucilage of Gum Tragacanth; mix them all together, and make Troches thereof according to Art. *E.*

I don't see any Advantage in these, more than in Sulphur alone, unless any one should like to take them better in this Manner. But the Difference cannot be great.

Trochisci de Terra Japonica.

Troches of Japan Earth.

Take of Japan Earth, two Ounces; of Gum Tragacanth, half an Ounce; of white Sugar a Pound; and a proper Quantity of Rose Water to make Troches, with this beat up the Troches. *E.*

These are by much the best Troches that I have met with for a Cough, which they relieve very eminently, if suffer'd to dissolve gradually in the Mouth. But the Japan Earth alone is much better, us'd in the same Manner, for those who can bear the Taste.

In the *London Dispensatory* they are thus directed;

Take Japan Earth and Gum Arabic, of each two Ounces; of Sugar of Roses, sixteen Ounces: Beat them together, and with a little Water make Troches. *L.*

In both these the Proportion of Sugar is too large. They will have a much better Effect with less than half the Sugar, tho' they are thus not quite so agreeable.

Trochisci Viperini, pro Theriaca Andromachi.

Troches of Vipers, for Venice Treacle. Take half a Pound of Viper's Flesh, separated from the Skins, and the Entrails,

Entrails, the Fat, the Heads, and the Tails, and boiled till it grows soft in Spring Water, seasoned with a little Dil and Salt, and afterwards cleared of the Back-bone; of Bisket Bread, ground and seared, two Ounces; beat them up together, with a proper Quantity of the Broth, remaining after the Vipers were boiled, into a Mass, to be formed into Troches, according to Art. *E.*

These Troches are brought to us from other Parts, ready prepared; but the dried Flesh of the Viper is with Justice preferred thereto.

Tabellæ Cardialgicæ

Cardialgic Lozenges.

Take of prepared Chalk, four Ounces; of prepared Crabs-claws, two

Ounces; of Bole Armenic, or French Bole, half an Ounce; of Nutmegs, a Scruple; of double refined Sugar, three Ounces. Make all into a Powder, and then with a little Water form it into Lozenges. *L.*

These are very powerful against that Disorder improperly called the Heart-Burn.

Trochisci Cardialgici.

Troches for the Heart-Burn.

Take of Oister-Shells, and Chalk, powder'd, each two Ounces; Gum Arabic, half an Ounce; Nutmegs, half a Dram; fine Sugar, ten Ounces; Baum Water, enough to make Troches. *E.*

These are of the same Use as the preceding.

C H A P. XII.

Of O I L S in General.

TH E R E is a certain Part in Plants, which being either spontaneously fluid, or easily made so by a gentle Heat, is called their Oil. This Oil may become thick by long standing, as we see in the Oil of Turpentine, which, tho' extremely, fluid at first, manifestly thickens by Degrees. It may, also, grow thick with Cold, and thus appear knotty like Fish-spawn; and may become solid, as we see in Wax; but by what Means soever it thus becomes hard, it flows again upon being applied to the Fire. This Oil, therefore, whenever it becomes liquid, is at the same Time unctuous, or exceeding soft and slippery to the Touch; tho' it has at the same Time certain Tenacity or Viscosity in its Parts, not found in Waters and Spirits. Again, these Oils are always

inflammable, and feed both Fire and Flame, being themselves disposed to go into the Flame; a Property not found in Air, Water, or Earth: Lastly, Oil will not intimately mix with Water; but when shook therein, repels the Water from it, collects together, and separates into a distinct Liquor; in which Respect it differs from Spirits. Vegetable Oil, therefore, is an unctuous inflammable Liquor, that does not mix with Water.

This Oil is found of many different Kinds in Plants; the volatile Sort, which is produced in the Distillation of the Waters from unctuous Vegetables, lodges the presiding Spirit, which contains the Taste and Smell of the Plant; whence in this Oil the particular sensible Properties of the Plant manifestly reside, which, being

ing once separated, robs the Plant of its Nature. Thus, if all this Oil were totally extracted from Cinnamon, Mace, Cloves, or Nutmegs, these Bodies would remain of their pristine Form, so as to be perfectly distinguishable; tho' they retain nothing of their peculiar Properties: For when all this Oil is taken away, those Spices can no longer be distinguished by the Smell or Taste; tho' the Body of the Oil receives not its Smell and Taste from itself, but intirely from that Spirit, which, when present, distinguishes these Oils, and when absent leaves them scarce distinguishable, and almost of one and the same Nature.

Sometimes in certain Plants, and particular Parts thereof, this Oil is collected pure, in little peculiar Cells or Receptacles: At other Times oily Particles are mixed with the Juices of Plants, and so dispersed therein as scarce to appear in the Form of Oil, but lie concealed in that of Soap. But when these latent oily Particles associate, or separate from the rest, they immediately appear in the Form of Oil. Thus the Juices of a Plant being extracted with Water, inspissated, made saponaceous, and dried, it is manifest they contain Oil by their Burning. On the other Hand, a pure Oil distils from Incisions made in the Fir, the Pine, and the Larch-Tree. A transverse Section being made into the Root of Masterwort, newly dug up in the Winter, we may, by the Help of a Microscope, perceive little Drops of Gold-coloured Oil ouzing out from certain Vessels on the Surface: And the same holds true of a Nutmeg, or Almond, cut with a warm Knife. But we find this Oil no where more plentiful than in the Cotyledons, or seminal Lobes of Plants, where it defends the tender Embryo from the pernicious Effects of unseasonable Water, or too great Cold; for

Freezing might probably prove destructive to so fine a Structure. This Oil also is, in the Winter-time, found driven towards the Bark by the preceding Summer; and being there more drained from its watery Moisture, is collected in great Abundance, especially in the Ever-greens. The Oil of Vegetables, therefore, chiefly abounds in their more durable Parts, in order to defend the other natural and more necessary ones, and is therefore found in such Parts as are farthest removed from the absorbing Vessels of the Roots, and the nutrimental Juice drawn in from the Earth; and thus more Oil is found in ripe Linseed, than perhaps in all the other Parts of the Plant together. Sometimes also this Oil is collected in such Quantity, as spontaneously to appear in its proper Form, burst its Cells, and run out; whence the Barks of Trees and Fruits principally afford it, as we see in Pine-apples, Juniper-berries, &c. especially in the Ever-greens, where the outward Bark is often cased over with this Oil. The Trees in the Northern Regions, which grow upon the high Mountains, exposed to the freezing Cold, more particularly afford it; whence it should seem, that this Oil is highly requisite to defend the Life of Vegetables against the freezing Cold of Winter. We likewise observe, that these fat Oils chiefly grow and collect in full-grown Plants, that soon after seem, as it were, to sleep or become aged; for both Herbs and Trees contain little Oil in their young growing State, but are distended with a dilute, thin, watery Juice. Thus Flax, soon after it is first sown, rises in the Form of Grass, and is merely aqueous; but, when come to Maturity, it loses its Greenness, grows yellow, and now affords a copious Oil, especially in its Seed: And the same holds true of a young

Pine, compared with one that is full-grown. It is also observed, that the shrubby Plants, which have lively Roots, gradually contract themselves upon the Approach of Winter, withhold their Juices, perspire but little, receive but little Nourishment from the Earth, nor throw much off into the Air; and thus they continue to do in a higher Degree, as the Winter comes on, till at length they in a manner rest. On the other Hand, as the Spring approaches, all begins to move again; they take in Nourishment, and perspire. If these Autumnal or Winter Stations may be call'd Times of Sleep, and the Summer and Vernal Periods Times of Waking, in Plants, it will generally appear that the Oils of Vegetables are increased in their Sleeping, but the Water in their Waking. Thus the Root of Mastwort, being perfectly leafless in the Winter, and lying hid and unactive in the Earth, may be called dormant; but if now dug up, and examined, it will be found rich in Oil; but if again dug up in May, it appears aqueous, saline, and by no means so oily as before; and the same is observed in Trees. Lastly, we see that old Trees are oppressed with their own Oil, and thence suffocated, thro' the Abundance of Fat, as the Pine, the Fir, &c. where this Oil appears in the Form of a Gum; but in others, under that of Rosin, Oil, or Balsam. And hence it is, that Gardeners so frequently complain of the Death of Trees, obstructed in their Bark, which thus die, as Animals do, when choaked with their own Fat.

The Chymist, therefore, who would extract the Oils of Vegetables, should first learn from Botany, that there are certain Seasons wherein Plants abound with Water and Salt, and then but little with Oil; and again, that there are other Seasons where-

in they principally abound with Oil, and but little with Water, and Salt: For whilst new Leaves, Flowers, and Fruit are forming in Plants, the Motion of the aqueous Juices, pregnant with Salt, is promoted, and the sluggish Oils excluded; but when the Leaves begin to wither and fall off, the Flowers to shed, or the Fruit to ripen, or spontaneously fall off, when perfect, then the oily Parts gradually collect together, and preside, the more subtle ones being dissipated by the Summer's Heat; Whence Builders tell their Timber in the Midst of Winter, that it may be durable, and Proof against Moisture and Rottenness; for all the hardest, most ponderous, and lasting Woods, are found to abound with a ponderous Oil: Thus Cedar and Lignum Vitæ contain an exceeding heavy, compact, and copious Oil. Chymists, therefore, must chuse their Subjects for Salt at a certain Season, and for Oil at a very different one.

OILS obtained by Expression.

Oleum Amygdalarum dulcium.

Oil of sweet Almonds.

Take any Quantity of sweet Almonds, fresh dried and blanched; bruise them in a Marble Mortar, put them into an Hempen Bag, and gradually force out the Oil by Means of a Press, with the Assistance of Fire.

In the same Manner are procured the Oils of bitter Almonds, Walnuts, Mace, Nutmegs, Lin seed, and Mustard-seed, the Iron Plates of the Press being first moderately warm'd.

Both ripe and unripe Olive Oil, as also Oil of Bays, are brought to us from foreign Parts. E.

In the London Dispensatory the Oil is ordered to be press'd out without the Assistance of Fire.

C c c *Oleum*

Oil of sweet Almonds contains very little Salt, tho' evidently much of the particular Nature of the Plant, as our Senses inform us; but, whilst fresh, it sheaths, blunts, and mollifies what is acrimonious in the Humours; relaxes the Fibres, Membranes, Vessels, and Viscera, when applied thereto; softens the Hardness of the Flesh, and cures its Crispature. It mollifies and moistens dead and dry Escars, and renders them separable from the sound Flesh by the vital Actions. It defends the naked Parts in Wounds, and prevents the dry Air from hurting them by Desiccation. It also prevents the thin Humours from exhaling too much thro' the open Mouths of the Vessels in Wounds, and thus spoiling the extreme Vessels; and hence it becomes an excellent Remedy for expeditiously healing recent Flesh Wounds. It is also accounted a great Anodyne, both as it is emollient and relaxing. But these Oils have one strange Property, whereby, with the Heat only of seventy Degrees, they presently degenerate, without any foreign Body being mixed with them, and thus become thin, sharp, bitter, rancid, yellow, corrosive, and inflammatory; whereas they were before thick, mild, sweet, almost insipid, white, anodyne, and relaxing; and these surprising Changes happen in a few Days in the Summer's Heat. Fresh drawn Oil of Almonds will prove healing and suppling to the parch'd rough Mouth and Jaws in the Quinsy; and the same Oil, in a few Days afterwards, suddenly inflames the Jaws of a Person in Health; and the sweeter it was when fresh, the sharper it proves when old and rancid. Hence Almonds, Walnuts, and Pistachoes become exceedingly nauseous when rancid, and subject to occasion a sudden Quinsy in the Throat, and excite a Fever, thro'

the burning Effect they have upon the Mouth, Throat, Stomach, and Intestines. Physicians, therefore, should be cautious when they order Oil of Almonds in acute Distempers, that it be fresh drawn, from Almonds that were not rancid, and, in the Heat of Summer, not kept above twenty-four Hours. The same thing is also found in Butter, Animal Fat, Marrow, and the more perfect Oils hereof: All which, though innocent when fresh, become highly nauseous by standing unsalted in a hot Air, where they turn yellow, blue, or green, become rank, corrosive, and very poisonous in the Plague. Thus a great Acrimony is sometimes found in Cheese that has been long kept, whereby the whole Mouth is sometimes violently inflamed; whence we may easily conceive, what Effects it might have upon the Viscera. It is an obvious Experiment, that Oil by Boiling will soon turn yellow, red, black, bitter, sharp, and unwholesome. And this shews us how Oils may, in six Hours time, become extremely bitter in the Stomach; and when vomited up, be erroneously taken for the Bile; for this Matter takes Flame at the Fire.

OILS made by Infusion and Decoction.

Oleum Absinthites.

Oil of Wormwood.

Take a Pound of the bruised Tops of fresh common Wormwood; and three Pints of ripe Olive Oil: Boil them gently till the Herb becomes crisp, and then strain out the Oil with Pressure.

In the same Manner are made

Oleum Anethinum, Oil of Dill, from the Leaves of the Plant.

— *Chamæmelinum*, Oil of Chamomile, from the Flowers.

Oleum

Oleum Hyperici, Oil of St. John's-wort, from the Tops.

— *Liliorum alborum*, Oil of White Lillies from the Flowers.

— *Rosarum rubrarum*, Oil of red Roses, from the Flowers.

— *Rutaceum*, Oil of Rue, from the Leaves. E.

Oleum Hyperici.

Oil of St. John's-wort.

Take of the Flowers of St. John's-wort, full blown, fresh, and carefully picked from their Calyxes, four Ounces; of Olive Oil, a Quart. The Oil being pour'd on the Flowers, let them stand together till the Oil is sufficiently tinged. L.

This is intended for external Use. The Virtues may be learned from those of *Hypericum* in the *Materia Medica*.

Oleum Lumbricorum.

Oil of Earth-worms.

Take of Earth-worms, well wash'd, half a Pound; of ripe Olive Oil, a Quart; of white Wine, half a Pint; and boil them together in *Balneo Mariæ* till the Wine is consumed; after which strain out the Oil by Expression. E.

Oleum Mucilaginum.

Oil of Mucilages.

Take of the recent Roots of Marshmallows (or of white Lillies) bruised, four Ounces; of fresh Squills bruised, two Ounces; Seeds of Fœnugrec, and Lin-seed, each an Ounce and a half: Let these be macerated in a sufficient Quantity of Spring-water; then let them boil till they form a thick and viscous Mucilage; which being strongly press'd out, add of Olive Oil, four Pints. Boil with a gentle Heat, or in a Bath-heat, till all the aqueous Moisture is

consumed, continually stirring it, to prevent Burning.

In the London Dispensatory it is thus directed, under the Title of

Oleum è Mucilaginis.

Oil of Mucilages.

Take of the Root of Marshmallows, fresh, half a Pound; Lin-seed, Fenugreek-seeds, of each three Ounces; of Water, a Quart; of Olive Oil, two Quarts. Boil gently the Roots and Seeds bruised, in the Water for half an Hour. Afterwards add the Oil, and renew the Boiling till the Water is quite wasted; then pour the Oil cautiously off. L.

Oleum Sambucinum.

Oil of Elder.

Take of Elder-flowers, one Pound; of Olive Oil, a Quart. Boil the Flowers in the Oil till they are almost crisp; then press out the Oil, and set it by, that the Fæces may subside. L.

The Virtues of this, as a Topic, may be learn'd from those of Elder-flowers.

Oleum viride.

Green Oil.

Take Bay-leaves, Leaves of Rue, of Marjoram, of Sea Wormwood, and of Chamomile, of each three Ounces; of Olive Oil, a Quart. The Herbs being bruised, boil them slightly in the Oil till they are become crisp; then press out the Oil, and, after the Fæces have subsided, pour it off. L.

The Ingredients of this Composition are very warm, and consequently the Ointment must be good in the same Intentions as the *Unguentum Nervinum*.

C H A P. XIII.

Of ARTIFICIAL BALSAMS.

Balsamum Anodynum, vulgò Guidonis.

Guido's Anodyne Balsam.

Take of Galbanum and Tacamahac, each half a Pound; *Venice* Turpentine, one Pound: Put them into a Retort, so as they may fill one Third of its Capacity, and distil, gradually increasing the Fire. Let the red Oil, or Balsam, be separated from the other Liquor. *E.*

This Balsam should seem to be extremely penetrating and resolvent.

Balsamum ad Apoplecticos.

Apoplectic Balsam.

Take of the Oil of Nutmegs obtained by Expression, an Ounce: Melt it in a Silver Vessel, and, being removed from the Fire, add thereto, of the distill'd Oils of Cloves, of Lavender, of Rosemary, each half a Dram; of the Oil of Amber, half a Scruple; of Balsam of *Perna*, a Dram; and mix them together according to Art. *E.*

This is made in Imitation of the *Balsamum Apoplecticum*. As it warms and enlivens, it is very proper to excite Sensation in the Nerves, by being smell'd to, or rub'd on the Temples, or on Paralytic Parts. A few Drops may also be exhibited internally, in any convenient Form.

Balsamum Locatelli.

Locatelli's Balsam.

Take of Olive Oil, a Pint; *Straßburg* Turpentine, yellow Wax, of each half a Pound; of red Saunders, six Drams. Melt the Wax, with some Part of the Oil, over a

gentle Fire; then add the rest of the Oil, and the Turpentine: In the last Place, mix in the Saunders, and stir the Whole well together, till it is nearly cold. *L.*

The Compilers of the *London Dispensatory* have very prudently continued the red Saunders in this celebrated Composition, as being a much more suitable Ingredient than Dragon's Blood, tho' the latter may perhaps give it a better Colour; a Circumstance not to be put in Competition with the Efficacy of a Medicine. It has been the Fashion to laugh at this Balsam as an injudicious Composition, and of little or no Efficacy. But whoever considers attentively the Ingredients, will be inclined to think it a very good Medicine, as an internal Balsamic and Vulnerary; but its greatest Excellence should seem to be in a Dysentery, and Erosions of the Intestines. People often speak and write of Medicines, upon Theory, without consulting Experience, which is only capable of determining the Character of any Remedy. And this has been the Case with respect to *Locatelli's* Balsam. As to its external Uses, there are much better Medicines for any Purpose that can occur.

In the *Edinburgh Dispensatory* it is thus directed:

Take of yellow Wax, a Pound: Melt it by a gentle Heat, in a Pint and a half of Olive Oil; then add of *Venice* Turpentine, a Pound and a half; and, when it is removed from the Fire, add of *Peruvian* Balsam, two Ounces; Dragon's Blood, one Ounce; stirring it continually till cold.

The

The red Saunders is a better Ingredient than the Dragon's Blood.

Balsamum Saponaceum, vulgo Opo-
deldoc.

The saponaceous Balsam, commonly call'd *Opodeldoc*.

Take of rectify'd Spirit of Wine, four Pints; *Alicant* Soap, one Pound; digest in a gentle Heat, till the Soap is dissolv'd; then add of Camphire two Ounces; chymical Oil of Rosemary, and of Origanum, each half an Ounce, and let these be mix'd well in by stirring, or shaking. *E.*

I don't know why the Oil of Origanum is here added.

This is the celebrated *Opodeldoc*, which is greatly recommended, and not without Reason, for resolving coagulated Blood and Juices, when stagnating and exciting Pains; as in Bruises, Strains, and Rheumatic Pains. But a much better Medicine for these Purposes is thus prepar'd, by the Title of

— In the London Dispensatory, the *Linimentum Saponaceum* is substituted for this.

Balsamum Vitæ.

Balsam of Life.

Take of the best Spirit of Turpentine, two Ounces; and dissolve in it of Camphire, six Drams. Take also, of the best Spirit of *Sal Ammoniac*, an Ounce and half, and dissolve in it half an Ounce of *Spanish* Soap. Mix these gradually together, and, if the Ingredients are very good, they will coagulate, and form a Kind of Soap.

I have met with nothing that more powerfully resolves stagnating Juices; or more effectually removes fix'd Rheumatic Pains, after the Use of due Evacuations, and Attenuants.

But some Caution is requir'd in its Use, for it is not always proper to remove fix'd Pains in the external Parts, lest they should fix on the *Viscera*, where they may do more Prejudice. If a due Proportion of Opium, or its Tincture, is added, it becomes an excellent and safe Anodyne, for external Use; and may be given internally, either with, or without the Opium, as a saponaceous and extremely penetrating Resolvent, where there is no Excess of Heat, and no Tendency to an alkaline Putrefaction.

Balsamum Anodynum Bateanum.

Bates's Anodyne Balsam.

To the *Balsamum Saponaceum* above describ'd, add of the Tincture of Opium a sufficient Quantity, more or less, as it is intended to be more or less Anodyne. *E.*

The Anodyne Balsam is thus directed in the *Edinburgh* Dispensatory. It is certainly an extremely penetrating and resolvent Anodyne, both for internal and external Use. *Quincy* recommends it strongly for a nervous Colic, the Jaundice, and as a Topic in Arthritic Pains; but in this last Case I should not be very forward to use it. Its great Excellence should seem to be in Nephritic Pains, after due Evacuations; for the Soap acting, as it were, under the Conduct of the Opium, is capable of affording great Relief. If the Chymical Oils were left out of the *Balsamum Saponaceum*, I should esteem it a better Medicine. And if the Saffron, formerly order'd in it, was continu'd, I should think it not the worse.

Offa Helmontiana.

Helment's Soap.

Take of the alkaline Spirit of *Sal Ammoniac*, so strong as to leave much of its Salt undissolved at

the Bottom; put it into a cold and dry cylindrical Glass with a narrow Mouth, so as to fill about one half thereof; pour to it gradually, a Quantity of pure cold *Alcohol*, so as to run gently down the Sides of the Vessel, till it be full; a white Coagulation will be made upon the Surface, where the lighter *Alcohol* rests upon the alkaline Spirit. If the Glass be now inverted, there will instantly appear a white opaque Coagulation, where the *Alcohol* and alkaline Spirit mix; and when they are both well shaken together, the whole becomes a white opaque consistent Mass, concreted like Stone, so that not a Drop will fall out of the Glass, while inverted. Stop the Vessel close, and set it by; Thus the Mixture will soon resolve into a Fluid, that floats at Top, and a dense, saline Concretion, that falls to the Bottom; so that, in a Year's time, the Salt will almost become solid below, with a Liquor floating above it. If the whole Mass, thus produc'd, be distill'd with a gentle Fire, an alkaline, balsamic, oily, solid Salt will sublime. The colder the Season, and the Place, in which the Experiment is made, the better it will succeed.

This is one of the most difficult Experiments in Chymistry, as it requires both the Liquors to be perfect, and the Observance of several Circumstances, any one of which being neglected, will cause it to miscarry; but, if they all be observed, it will succeed. Here we see, that a pure volatile alkaline Salt will closely attract to itself the most subtle Oil that is known, that is, an *Alcohol*; whence the Soap, so produced, is the most subtle and penetrating of all Soaps, consisting of an exceedingly subtle and volatile *Al-*

cali and Oil, wonderfully united together in an Instant. If this Medicine be diluted with *Canary*, and taken upon an empty Stomach, it passes perhaps, thro' all the Vessels of the Body, resolves Concretions, opens Obstructions, excites the vital Powers, and thus successfully cures many dangerous Distempers, proceeding from an obstructing Matter, capable of being resolved by it. But its Virtue vanishes too soon, as being so extremely volatile, and therefore becomes unequal to the more stubborn Distempers. It is highly commended in the Jaundice, unattended with an acute Inflammation; it does not dissolve the Stone, or prevent the Concretion or Increase thereof; it dissolves in a gentle Heat, like Ice, and returns to a solid Form in the Cold. If pure *Alcohol* be thus mixed with one third of dry volatile *Alkali*, it makes a much more solid Soap, as being without Water, which is always double the Quantity in the strongest alkaline Spirit, with respect to the pure Salt.

Linimentum Saponaceum.

Saponaceous Liniment.

Take of the Spirit of Rosemary, a Pint; of hard *Spanish* Soap, three Ounces; of Camphire, one Ounce. Digest the Soap with the Spirit of Rosemary till it is dissolved, then add the Camphire. *L.*

This is contriv'd for much the same Uses as the *Balsamum Saponaceum*, for which it is substituted.

Balsamum Traumaticum.

Vulnerary Balsam.

Take of powder'd Benjamin, two Ounces; *Peruvian* Balsam, an Ounce and half; hepatic Aloes, half an Ounce; of rectify'd Spirit of Wine, a Quart; digest them in a Sand Heat for four Days, and strain. *E.*

In the *London Dispensatory* this Medicine is thus directed :

Take of Benjamin, three Ounces ; of strain'd Storax, two Ounces ; of Balsam of *Tolu*, one Ounce ; of Succotrine Aloes, half an Ounce ; of rectify'd Spirit of Wine, a Quart. Digest them together till as much as may be of the Gums are dissolved, then strain the Spirit off. *L.*

Both these are made in Imitation of a Medicine, which has been of considerable Use in private Families, call'd the *Jesuit's Drops*, or *Fryer's Balsam*. There are, I believe, at least twenty People in *London*, who get a comfortable Subsistence by selling it as an Arcanum, under various Names and Titles. And one has had the Impudence to obtain a Patent for it, tho', in order to this, he must have been obliged to swear it his own Invention, in Defiance of Conscience and the Pillory; notwithstanding that *Pomet* publish'd the Receipt, in his History of Drugs, many Years ago. It is much celebrated Abroad, under the Name of *Baume de Commandeur de Berne*, or

Balsamum Commendatoris,

The Commander's Balsam.

The Receipt stands thus :

Take dry Balsam of *Peru*, one Ounce ; Storax in Tears, two Ounces ; Benjamin in Tears, three Ounces ; Aloes Succotrine, the best Myrrh, Olibanum in Tears, Roots of *Bohemian Angelica*, Flowers of *St. John's Wort*, of each half an Ounce ; Spirit of Wine, one Quart ; beat all together, and put them into a Bottle well stop'd, which hang in the Sun during the Dog-days ; at the End of which Time, the whole must be pass'd thro' a Li-

nen Cloth, and used for the Purposes under specified.

All Gunshot Wounds, and such as are made with sharp Instruments, if they are not mortal, are cured in the Space of eight Days, by the Application of this Balsam, either with a Feather, Cotton, or by way of Injection, provided the Wound has been first of all dress'd with it, and no other Medicines have been used ; for when the Wound is at first dress'd with it, no Pus will afterwards be formed ; whereas the Generation of Pus is always the Effect of dressing with the ordinary Medicines. There is no Occasion either for Tents or Plaisters when this Balsam is apply'd, especially at the first Dressings. Upon its first Application to the Wound, it creates an intolerable Pain ; but that soon goes off, and is no more felt. This Balsam is so admirable a Remedy for the Colic, that if four or five Drops of it are intimately mixed with a Glass of Wine, and drank, the Patient's Indisposition is soon after remov'd. It is also a sovereign Remedy for the Gout, when apply'd to the Part affected with a Feather or Cotton. In a Tooth-ach it is of singular Service, when Cotton, soak'd in it, is apply'd to the Tooth affected. All Sorts of Ulcers, as also Cancers and Chancres, are cured by it. It is effectual against the Bites of venomous Animals, those of mad Dogs not excepted. It prevents Pitting by the Small-pox, if the Pustules are anointed with it as soon as they appear on the Face ; for it dries them before Pus is form'd in them, upon which Circumstance the Pitting depends. It proves an excellent Remedy for the Hæmorrhoids, if they are rubb'd with it when the Patient goes to Bed. It is excellent for Effluxions and Bruises, if the Parts affected are anointed with it.

Five or six Drops of it, exhibited internally, in four or five Spoonfuls of Broth, prove an excellent Remedy for the Purple Fever. It is also good for sore Eyes, when put into them with a Feather. It is also excellent for Pains in the Stomach, in which Case, if the Patient is feverish, he must take it in Broth, and, if not, in Wine. It cleanses the Stomach, and procures an Appetite. It must never be warm'd, but always be apply'd cold, and it becomes dry as soon as it is apply'd to the Part affected. Five or six Drops of it, taken in Wine or Broth, are very proper for provoking the *Menses*, when defective; and giving a Check to them, when too luxuriant. When we pour out any Quantity of this Balsam, we must stop the Phial immediately after, to prevent its Evaporation. If any Wound has been previously dressed with other Medicines, it must be washed with warm Wine before the Application of this Balsam, which will cure it effectually,

tho' not so speedily as if the Balsam had been used at first. It cures Fistulas, however old, and in whatever Parts of the Body. Five or six Drops of it, exhibited in white Wine, or in three or four Spoonfuls of Broth, are an excellent Remedy for Fluxes and Hemorrhages. It is good for the Pricking of Horses, when shoed; by pouring a Drop or two into the Hole from which the Nail is drawn, it is cured immediately.

Balsamum Viride.

The green Balsam.

Take of Linseed Oil, and Oil of Turpentine, each a Pound; of Verdigrise, reduc'd to Powder, three Drams; and boil them together, keeping the Mixture stirring, so as to dissolve the Verdigrise. *E.*

This should seem a very good Medicine to cleanse and deterge foul Ulcers, and keep down fungous Flesh.

C H A P. XIV.

Of OINTMENTS and PLAISTERS.

GENERAL RULES for making OINTMENTS and PLAISTERS.

I. **S**UCH Ointments and Plaisters as have Plants in their Compositions, are to be boiled till the Herb becomes almost crisp, with Care to avoid their turning black; then after straining, they are again to be set over the Fire, to evaporate all their Moisture, let the Plants be fresh gather'd, succulent, and well bruised, unless they are order'd dry.

II. The *Metalline Powders* are to be first boiled with the oily or fat Ingredients, till they are thoroughly

incorporated: But Plaisters require to be mixed with Spring Water, till they become of the proper Consistence. Gums which are readily dissolvable, as also Powders and Turpentine, are to be added towards the End of the Operation.

III. Ointments as well as Plaisters are not all to be made of the same Consistence, the softer Plaisters come under the Name of *Cerates*, and ought to be kept in Gallipots or Bladders; as those of a more solid Nature are formed into Rolls. But the Composition of both is so various, that

that particular Rules are generally added to direct the Artift.

O I N T M E N T S.

Unguenium Ægyptiacum.

Egyptian Ointment.

Take of Verdigrise, reduced to fine Powder, five Ounces; of Honey, fourteen Ounces; of Vinegar, seven Ounces; boil them together over a gentle Fire, to the Consistence of an Ointment. *E.*

This is of considerable Use in Surgery, to keep down fungous Flesh, and cleanse fordid Ulcers.

Unguentum album.

The white Ointment.

Take of Oil of unripe Olives, three Pints; of Ceruse, a Pound; of white Wax, nine Ounces; and mix them together, according to Art, so as to make an Ointment. *E.*

This is intended principally as a Cooler.

Unguentum album Camphoratum.

White Ointment with Camphire.

This is made by adding to the preceding white Ointment, when remov'd from the Fire; an Ounce of Camphire, rubb'd with a few Drops of Oil of Almonds, and mixing them together. *E.*

The *Unguentum album* of the London Dispensatory is thus directed:

Take of Olive Oil, one Pint; of white Wax, four Ounces; of Sperma Ceti, three Ounces. Melt all together with a gentle Heat, and stir them very briskly without ceasing, till they are fully cold. *L.*

This seems well contriv'd for a cooling Ointment, and must be proper enough for slight Excoriations. The Ceruse is left out, because, as we

are told, it may be dangerous when apply'd to the tender Bodies of young Children; but there seems to be no Foundation for this Apprehension.

If a Dram and half of Camphire, beat with a few Drops of Oil of Almonds, be added to this, it is then call'd *Unguentum album Camphoratum*.

Unguentum Antiphsoricum.

Ointment for the Itch.

Take of Elecampane Root, and the Root of sharp-pointed Dock, each three Ounces; slice and bruise them; then pour thereon three Pints of Spring Water, and a Pint of Vinegar; boil them to a half, and strongly press out the remaining Liquor; to which add, eight Ounces of the Leaves of fresh Water Cresses well bruised, and add four Pounds of Hogs-Lard; then boil all together, till the aqueous Moisture is exhaled, and press out the Ointment, whereto put four Ounces of the Oil of Bays, and the same Quantity of yellow Wax; afterwards mix the whole together. Sulphur may be hereto added occasionally. *E.*

The Title expresses the Uses.

Unguentum Antiphsoricum, cum Mercurio.

Ointment for the Itch, with Mercury.

This is made of the preceding Ointment, by adding thereto four Ounces of Quicksilver, kill'd by being ground with a proper Quantity of Venice Turpentine, and mixing them together according to the Rules of Art, so as to make an Unguent. *E.*

Some Care and Caution is necessary in the Use of this; otherwise it will raise a Salivation.

Unguentum, seu Linimentum Arcae.

The Ointment, or Liniment of
Arceus.

Take of Hogs-Lard, a Pound; of Goats Suet, two Pounds; of Gum Elemi, and *Venetian* Turpentine, each a Pound and half; melt them together, then strain the whole, and make thereof an Unguent according to Art. *E.*

Arceus, the Author of this Composition affirms, that it ripens, digests, deterges, and incarns.

In the *London* Dispensatory it is thus directed under the Title of

Unguentum de Gummi Elemi.

Ointment of Gum Elemi.

Take of tried Mutton Suet fresh, two Pounds; of Gum Elemi, one Pound; of common Turpentine, ten Ounces. Melt the Gum with the Suet, and all being removed from the Fire, add forthwith the Turpentine, and, while the Mixture is fluid, strain it. *L.*

This is intended as a Digestive, and an Incarnant, for which it is pretty much in Esteem.

Unguentum Basilicon.

The Ointment Basilicon.

Take of yellow Wax, Goats Suet, white Rosin, dry Pitch, and *Venice* Turpentine, each half a Pound; of Olive Oil, two Pounds and a half: Dissolve the other Ingredients in the Oil, stir them well together, then strain the whole for an Ointment. *E.*

This is us'd as a Digestive and Incarnant.

Unguentum Basilicum flavum.

Yellow Basilicum.

Take of Olive Oil, a Pint; yellow Wax, yellow Rosin, *Burgundy* Pitch, of each a Pound; of common Turpentine, three Ounces.

Melt the Wax, Rosin, and Pitch with the Oil, over a gentle Fire, then take them off, add the Turpentine, and strain the Mixture while it remains hot. *L.*

This is intended for the same Uses as the preceding.

Unguentum Basilicum nigrum vel trapbarmacum.

Black Basilicum.

Take of Olive Oil, a Pint; yellow Wax, yellow Rosin, common Pitch, of each nine Ounces. Mix all together, and strain the Mixture off while hot. *L.*

This is not much in use; and is said to be subject to generate fungous Flesh in Ulcers.

Unguentum Basilicum viride.

Green Basilicum.

Take of yellow Basilicum, eight Ounces in Weight; of Olive Oil, three Ounces in Measure; of prepared Verdigrise, one Ounce. Mix all into an Ointment. *L.*

This is considerably detergent, and proper in order to keep down fungous Flesh in Ulcers.

Unguentum de Lapide Calaminari.

Ointment of Lapis Calaminaris.

Take of yellow Wax, eighteen Ounces; melt it in Oil of Olives, two Pints; then gradually sift into it, of powder'd *Lapis Calaminaris*, ten Ounces and a half. *E.*

This is made in Imitation of the celebrated Cerate of *Turner*, which he thus directs,

Ceratum de Lapide Calaminari.

Cerate of Lapis Calaminaris, commonly call'd *Turner's Cerate.*

Take of fresh-made unsalted *May* Butter, and of the best yellow Wax, sufficiently defecated, each three Pounds and an half; of pure

pure and newly prepared Oil of Olives, four Pounds ; and of the best Calamine Stone, sufficiently triturated, and pass'd thro a Sierce, two Pounds and ten Ounces : Let the Wax and Butter be put into a proper Vessel, with the Oil, and melted over a gentle Fire ; then strain them thro' a Linen Cloth into another Vessel, and immediately sprinkle the Powder of the Calamine Stone into it by Degrees, continually agitating the Mixture, and stirring from the Bottom of the Vessel, till it begins to cool, and becomes so thick, that the Powder, in consequence of its Weight, can no longer subside to the Bottom of the Vessel.

Turner gives the following Encomium of this Cerate:

As I have had, says he, ample Experience of this Cerate, I may be allow'd, I hope, to judge of its singular Properties, and good Effects, in all cutaneous Ulcerations and Excoriations, either from Scalding, Burning, or Fretting of the said Parts, by means of salt, acrid, or sharp Humours ; upon which Accounts, not straining a Tittle beyond its deserved Eulogy, I am bold to affirm, it will do more in all these superficial Hurts of the Body, than either *Unguentum Tutia*, *Diapompholyx*, *Nutritum*, *Desiccativum Rubrum*, *Rosatum*, or all the Epulotic Medicines now in Use ; and for which Cause I can, for the public Benefit, sincerely recommend it to all the Professors of the Art ; and do wish, that the Apothecaries would keep it made up in their Shops, to deliver, at a suitable Price, to indigent, or poor People, instead of their ridiculous *Lucatellus's* Balsam, and other improper Medicines, which they call for, ignorantly, to heal their Skin-deep Maladies. I know the Medicine

has been imitated by several ; and I have seen somewhat like it in some Gentlemen's Salvatories ; but I know not more than two Persons I ever communicated it to, as I was wont to prepare it for my own Use. The Medicine, thus prepared, is of a good Consistence, and a true Cerate, serving both for Pledget and Plaister, neither sticking troublesome, nor running off, or about, by the Heat of the Parts ; but keeping its Body, and performing Things incredible. Whoever thinks fit to take it into Practice, will never repent it, nor perhaps (when he has experienced it as I have done) think I have said too much in its Commendation. This is the Medicine I have so often taken Notice of, under the Name of *Ceratum de Lapide Calaminari*, which, that I might contribute my Mite to the Surgeon's Treasure of Medicine, I here have publish'd, and leave it to take its Fate.

Unguentum Cæruleum fortius.

The stronger blue Ointment.

Take of tried Hogs-Lard, two Pounds ; of Quicksilver, one Pound ; of the simple Balsam of Sulphur, an Ounce. Rub the Quicksilver with the Balsam of Sulphur, till the Quicksilver no longer appears ; then add by Degrees the Lard warmed, and diligently mix them. *L. 1000. 10.*

Perhaps the Balsam of Sulphur, here directed, may be a little Check upon the Quicksilver, and prevent its rising to the Mouth so readily as it would do otherwise. It is also said to divide the Mercury sooner and better than Turpentine.

Unguentum Cæruleum mitius.

The weaker blue Ointment.

Take of tried Hogs Lard, four Pounds ; of Quicksilver, one Pound ; of common Turpentine,

an Ounce. Rub the Quicksilver in a Mortar with the Turpentine, till the Quicksilver appears no longer, then add, by Degrees, the Lard warmed, and mix them diligently. *L.*

Unguentum Mercuriale.

Mercurial Ointment.

Take of Hogs Lard, two Ounces; Quicksilver, half an Ounce; rub them in a Mortar, till the Globules of Quicksilver no longer appear.

This may be made with only a double, or triple Quantity of Hogs Lard, to the Quicksilver. *E.*

In all these the Axungia is in too great a Proportion to the Quicksilver, which renders it more troublesome to rub in.

Unguentum Citrinum.

The yellow Ointment.

Take an Ounce of Quicksilver, and two Ounces of Spirit of Nitre; dissolve them in a sand Heat, and, while very hot, mix therewith a Pound of melted Hogs Lard; before the Lard is cold, stir them briskly together in a Marble Mortar, so as to make an Ointment. *E.*

An Ounce of strong Spirit of Nitre, or *Aqua fortis duplex*, will readily dissolve an equal Weight of Quicksilver; and this, I think, should be the Proportion for this Ointment. It is an Escharotic, and is sometimes apply'd to Chancres, or us'd for eating down the Callosities of Ulcers.

Unguentum desiccativum rubrum.

The red drying Ointment.

Take of Olive Oil, a Pound and half; and of white Wax half a

Pound; melt them together, and when remov'd from the Fire, sift in the following Ingredients reduc'd to Powder, *viz.* of Calamine, six Ounces; of Litharge of Gold and Bole Armoniac, each four Ounces; and of Camphire, first rubb'd with a little Oil of Almonds, three Drams; then stir them briskly together into an Ointment. *E.*

This, as its Title expresses, is intended as a Desiccative.

Unguentum Dialthææ.

Ointment of Marshmallows.

Take of the Oil of Mucilages, two Pounds; of yellow Wax, half a Pound; of white Rosin, three Ounces; and of Venice Turpentine, an Ounce and half; mix them together, and make an Ointment according to Art. *E.*

This is prepar'd somewhat different in the London Dispensatory, under the Title of *Unguentum ex Althæa*, thus:

Unguentum ex Althæa.

Ointment of Marshmallows.

Take of the Oil of Mucilages, three Pints; of yellow Wax, one Pound; of yellow Rosin, half a Pound; of common Turpentine, two Ounces. Melt the Rosin and Wax with the Oil, then, these being taken off of the Fire, add the Turpentine, and strain the Mixture while it is hot. *L.*

This is much us'd as an Emollient and Relaxer.

Unguentum Diapompholygos.

Ointment of Pompholyx.

Take of Oil of unripe Olives, twenty Ounces; of the Juice of common

mon Nightshade Berries, or of the *Solanum lethale*, eight Ounces ; boil them together over a gentle Fire, till the Juice is exhale'd ; then, towards the End of the Operation, dissolve five Ounces of white Wax in the Oil, and, removing it from the Fire, add thereto, whilst it yet remains hot, the following Ingredients reduced to Powder, four Ounces of Ceruse ; of calcin'd Lead and Pompholyx, each two Ounces ; and of clean Frankincense, an Ounce. Mix all together into an Ointment. *E.*

It is intended for hot, inflam'd, and corrosive Ulcers, which discharge a saline, acrimonious, and corrosive Matter. But I don't know that it is much in Use.

Unguentum Epispasticum.

Blistering Ointment.

Take of Hogs Lard and *Venice Turpentine*, each three Ounces ; of yellow Wax, one Ounce ; of Cantharides, three Drams : Melt the Lard and Wax together, then add the Cantharides in Powder ; lastly, the Turpentine ; and mix all together into an Ointment. *E.*

This, as the Title imports, is design'd for a Vesicatory ; and intended for dressing of Blisters, to keep them running, or rendering them perpetual, as they are call'd.

Unguentum ad Vesicatoria.

Ointment for Blisters.

Take of tried Hogs Lard, and of the blistering Plaister, equal Weights. Melt them together with a very gentle Heat, and stir them well, till fully cold. *L.*

This is design'd for the same Uses as the preceding.

Unguentum à Mercurio præcipitato.

Ointment with precipitated Mercury.

Take of the simple Ointment, an

Ounce and a half ; of precipitated Sulphur, two Drams ; of white precipitated Mercury, two Scruples. Mix all together, and moisten them with the Ley of Tartar, to bring the whole to the Consistence of an Ointment. *L.*

Boerhaave strongly recommends an Ointment made of an Ounce of *Pomatum*, or Ointment of Roses, and a Dram of the white Precipitate of Mercury, for all cutaneous Disorders, in which Cases it is really very excellent. This Ointment is an Imitation of his. But the white Precipitate seems to be in too small a Proportion. I don't know from Experience, whether the Sulphur imparts to it any Virtues, but I should suspect that it does not.

Unguentum Nervinum.

Nerve Ointment.

Take of the Leaves of Male South-ernwood, Marjoram, or *Origanum*, Mint, Pennyroyal, Rue, and Rosemary, each six Ounces ; let the Herbs be fresh gather'd, well bruis'd, and boil'd till their aqueous Part is evaporated, in five Pints of Neat's Foot Oil, and three Pounds of Beef Suet, then press out all that will run ; add thereto half a Pound of Oil of Bays, and mix them together into an Ointment. *E.*

This is a warm invigorating Topic, and may be us'd with good Effect, to excite the Nerves to Action, when too languid.

Unguentum viride.

Green Ointment.

Take of the green Oil, three Pounds ; of yellow Wax, ten Ounces. Melt the Wax with the Oil over a gentle Fire, continually stirring till the Mixture is cold. *L.*

This

This seems calculated for the same Purposes as the preceding.

Unguentum Nutritum.

The Ointment called Nutritum.

Take of Litharge of Gold, and of Vinegar, each half a Pound; of Oil of unripe Olives, a Pound and a half: Rub them well together in a Mortar, pouring in at one time a little Oil, and at another a little Vinegar, till the latter no longer appears disunited, but the whole Mixture becomes a white Unguent. *E.*

This is a great Desiccative, or Dryer.

Unguentum Tripharmacum.

Ointment of three Ingredients.

Take of the common Plaster, four Ounces in Weight; of Olive Oil, two Ounces in Measure; of Vinegar, one Ounce in Measure. Set them together over a gentle Fire, continually stirring them, till they are brought to the Consistence of an Ointment. *L.*

This is substituted for the preceding, in the last *London Dispensatory.*

Unguentum Ophthalmicum.

Ointment for the Eyes.

Take of the Ointment of Tutty, an Ounce and a half; of the Ointment of Lead, two Scruples; of Camphire, half a Scruple: Mix them together, and make thereof an Ointment by the Rules of Art. It may also be made with a double or triple Proportion of Camphire.

This is designed as a drying and astringent Topic, to be used in

Rheums, and Defluxions of the Eyes.

Unguentum Ophthalmicum Sloani.
Sir Hans Sloane's Ophthalmic Ointment.

Take of prepared Tutty, one Ounce; of *Lapis Hematilis* prepared, two Scruples; of the best Aloes prepar'd, twelve Grains; of prepar'd Pearl, four Grains. Put them into a Porphyry, or Marble Mortar, and rub them with a Pestle of the same Stone very carefully, with a sufficient Quantity of Vipers Grease or Fat to make a Liniment: To be used daily, Morning or Evening, or both, as hereafter directed.

Sir Hans Sloane informs us, that this Remedy was communicated to Sir Theodore Mayerne by Sir Matthew Lister, and that Sir Theodore probably communicated it to Dr. Thomas Rugeley, Father to Dr. Luke Rugeley, who used it with extraordinary Success in the Cure of sore Eyes. He farther informs us, that for a pecuniary Reward he procured the genuine Receipt, in the Doctor's own Hand-writing, from a Person whom Dr. Rugeley employ'd in making it; and that he, Sir Hans, reform'd, improv'd, and us'd it, for many Years, in the Form above specify'd. The principal Improvement Sir Hans takes Notice of, is, the Substitution of Vipers Fat for Hogs Lard, which was directed in the original Receipt.

Sir Hans informs us, that the Method which has best succeeded in facilitating the efficacious Use of this Liniment, is to bleed and blister in the Neck and behind the Ears, in order to draw off the Humours from the Eyes; and afterwards, according to the Degree of the Inflammation, or Acrimony of the Juices, to make a Drain by Issues between the Shoulders, or a perpetual Blister: And, for

for washing the Eyes; he generally recommends Spring-water, which he thinks preferable to any spirituous Lotion, whether simple or compound. And the best inward Medicines he has experienced to be Conserve of Rosemary-flowers, Antiepileptic Powders, such as *Pulvis ad Guttum*, Betony, Sage, Rosemary, Eyebright, wild *Valerian-root*, Castor, &c. washed down with a Tea made with some of the same Ingredients; as also Drops of *Spiritus Lavendulae compositus*, and *Sal Volat. oleos.* If the Inflammation returns, drawing about six Ounces of Blood from the Temples by Leaches, or Cupping on the Shoulders, is very proper. The Liniment is to be applied with a small Hair Pencil, the Eye winking, or a little opened. In prosecuting the Cure of sore Eyes, he has been sometimes surprized at Want of Success, till at length he found that the Cause was a lurking intermitting Fever, every Fit of which affected the Eyes, and rendered their Disorder obstinate; wherefore, upon taking off the Fever by a proper Use of the Bark, the Cure has been effectually performed.

This Medicine has cured many, whose Eyes were covered with opaque Films, and Cicatrices left by Inflammations and Apostems of the Cornea; which though they happen to Persons of all Conditions, yet are more common among the poorer Sort of People; many of whom were so totally deprived of Sight, as to be under a Necessity of being led; and, after some Time, could perfectly well find their Way without a Guide. And it is not only very beneficial in such Cases, but also where there is an excessive Pain in the Eyes, shooting thence up into the Head, as he particularly remembers in a great Lady, who had such Pains in her sore Eyes, and Head, that she had,

when he first saw her, taken about fifty Drops of Laudanum thrice in twenty-four Hours; of which Complaints she and many others have been relieved by this Medicine, without the Help of any Opiate.

He says, it is to be observed (contrary to the common Practice, and to the Opinion which he himself entertained in his earlier Days, and communicated to the Public in the Introduction to his *Natural History of Jamaica*) that Cathartics, especially with the Addition of Mercury, are prejudicial in Diseases of the Eyes, which are cured by this Medicine.

It is, says he, also worthy of Remark, that People afflicted with weak Eyes are over-sfond of Hoodwinking, or covering them from the Light, which sometimes retards the Cure, by keeping their Eyes too warm; and, therefore, he has constantly advised them to throw away these Coverings, as soon as they could possibly bear the Light.

Unguentum à Pice.

Ointment of Tar.

Take of Tar, of tried Mutton Suet, equal Weights. Melt them together, and strain while hot. *L.*

Unguentum Populeon.

Ointment of Poplar.

Take a Pound of the fresh gather'd Buds of the black Poplar, bruise them, and mix them well with four Pounds of fresh Hog's Lard, to be kept in this State, put up in a close glaz'd Vessel, till the following Herbs are in Season: Then take of the Leaves of Hemlock, black Henbane, Garden Poppy, and common Nightshade, each six Ounces; Bruise them all, and put them to the Lard, mix'd with the Poplar-buds: Now boil them over a gentle Fire till the aqueous Moisture is consumed; then strain and

and strongly press out the Ointment, in which dissolve four Ounces of yellow Wax. *E.*

This is intended for a cooling Topic, but is not much in Use.

Unguentum Rosaceum, vulgò Pomatum.

Rose Ointment, commonly called Pomatum.

Take any Quantity of Hog's Lard, cut it into small Pieces, put it into a glazed earthen Vessel, and pour thereon as much Spring-water as will float some Inches above it: Let them stand together for ten Days, the Water being shifted once a Day; then melt the Lard with a very soft Heat, and throw it into a sufficient Quantity of Rose-water, wherein let it be well work'd; then pouring the Water off from it, add a few Drops of Oil of Rhodium. *E.*

Unguentum simplex.

The simple Ointment.

Take of tried Hog's Lard, two Pounds; of Rose-water, three Ounces. Pound the Lard with the Rose-water, till they are well mix'd; then melt the Lard with a very gentle Fire, and set it by a little while, that the Water may subside: Afterwards pour out the Lard, and leave the Water; then stir and beat the Lard, without ceasing, while it is growing cold, that it may be broke into as light and yielding a Mass as may be; and then add as much Essence of Lemons as shall be requisite to give it an agreeable Scent. *L.*

These two are substituted for the *Unguentum Pomatum* of former Dispensatories.

Unguentum Sambucinum.

Ointment of Elder.

Take of Elder-flowers, full blown,

four Pounds; of tried Mutton Suet, three Pounds; of Olive Oil, one Pound. Boil the Flowers, till they become almost crisp, in the Suet and Oil first melted together: Then press them out. *L.*

In the *Edinburgh Dispensatory* the *Unguentum Sambucinum* is thus directed:

Take of the internal fresh Bark of Elder, and of fresh Elder-flowers, each four Ounces: Bruise them well, and boil them in two Pints of Linseed Oil to the Consumption of the Moisture; then press out the Oil, and melt in it, of white Wax, six Ounces. Mix into an Ointment.

The particular Virtues of these may be learn'd from those of Elder. In general, it seems intended for a relaxing, anodyne Topic, and as a proper and safe Application to an *Erysipelas*.

Unguentum Saturninum, vulgò Balsamum Universale.

Ointment of Lead, commonly called the Universal Balsam.

Take of Litharge of Gold, and red Lead, each a Pound; of Vinegar, four Pints; and boil them together till one Half of the Liquor is wasted; then strain off the other: To the Remainder add the same Quantity of Vinegar, and proceed to boil and strain as before, till the Operation shall have been performed six several Times: Then mix all the Parcels of strain'd Liquor together in a glaz'd earthen Vessel, and exhale them to the Consistence of an Extract. Take of this Extract, and of white Wax, each three Ounces; of Olive Oil, a Pound; and mix them together, according to the Rules of Art, so as to make an Ointment. *E.*

This

This is very much used as a Desiccative, and Cicatrizer, and in all Intentions where Lead can be of Service. But in the last Edition of the *Edinburgh Dispensatory* it is thus directed :

Take of the Sugar of Lead, two Ounces; of white Wax, three Ounces; of Olive Oil, one Pint. Let the Wax be melted in the Oil, and then gradually add the Sugar of Lead, stirring it in perpetually, till the Ointment grows stiff by Cold.

In the *London Dispensatory* it is thus ordered :

Take of Olive Oil, half a Pint; of white Wax, an Ounce and a half; of Sugar of Lead, two Drams. Rub the Sugar of Lead, first brought to a very subtil Powder, with some Part of the Oil; then add this to the Wax, melted with the rest of the Oil, and stir the Mixture till it is fully cold. *L.*

In this the Proportion of Sugar of Lead is much less than in the preceding.

Unguentum ē Sulphure.

Ointment of Sulphur.

Take of simple Ointment, half a Pound; of Flowers of Sulphur unwashed, two Ounces; of Essence of Lemons, a Scruple. Mix all together. *L.*

This seems intended for the Itch; but the common black Brimstone is said to be more effectual than the Flowers of Sulphur. This Ointment may be improved by an Addition of Salt of Tartar; and, in some obstinate cutaneous Cases, Pepper is added with good Effect.

Unguentum Tutie.

Ointment of Tatty.

Take any Quantity of prepared Tatty, and mix it with as much

purified Vipers Fat as is requisite to bring it to the Consistence of a soft Ointment. *L.*

This seems intended for a Desiccative, principally for sore Eyes. I suppose the Vipers Fat is here ordered, on Account of the Character given of it by Sir *Hans Sloane*, for Disorders of the Eyes, in treating of the *Unguentum Ophthalmicum* above described.

In the *Edinburgh Dispensatory* the *Unguentum Tutie* is thus directed :

Take of white Wax, three Ounces : Melt it over a gentle Fire, in ten Ounces of the best Oil of Olives; then gradually sift into it, of Tatty, two Ounces; of Calamine, one Ounce; continually stirring it till the Ointment grows cold.

This may be also made *extempore*, by mixing these Powders with four times the Quantity of unsalted Butter.

Unguentum Vermifugum.

Ointment against Worms.

Take of the Leaves of Female Southernwood, common Wormwood, Rue, Savine, and Tansey, each two Ounces. Bruise and boil them, with a Pound and a half of Olive Oil, and a Pound of Hogs Lard; till the aqueous Moisture is consumed; then strain and press out all that will run; in which melt three Ounces of yellow Wax: Afterwards add of the Gall of an Ox, and of *Succotrine Aloes*, each an Ounce and a half; of *Colocynth*, and Worm-seed, each an Ounce: Boil them all together, keeping them continually stirring, so as to make an Ointment. But observe that the Aloes, the *Colocynth*, and the Wormwood, are first to be reduced to very fine Powder. *E.*

This seems to bid the fairest of any Composition I have seen, or heard

Linimentum album.

White Liniment.

Take of Olive Oil, three Ounces in Measure; of Sperma Ceti, the Weight of six Drams; of white Wax, two Drams: Melt all together with a gentle Fire, briskly stirring, without Intermiſſion, till the Mixture is become quite cold.
L.

This differs from the *Unguentum album* only in the Proportion of the Ingredients, ſo contrived as to render this ſofter.

Linimentum Tripharmacum.

Liniment of three Ingredients.

Take of the common Plaſter, four Ounces in Weight; of Olive Oil, four Ounces in Measure; of Vinegar, the Measure of one Ounce: Set them over a gentle Fire, continually ſtirring, till the Liniment has acquired its due Conſiſtence.
L.

This differs only in Conſiſtence from the *Unguentum Tripharmacum*.

Linimentum volatile.

Volatile Liniment.

Take of Oil of Almonds, one Ounce in Measure; of the Spirit of Sal Ammoniac, the Weight of two Drams. Shake them together in a wide-mouth'd Vial, till they perfectly unite. *L.*

This is ordered to be made with Spirit of Sal Ammoniac, with an alkaline Salt; not that made with Quick Lime. This is ſo readily made extemporaneouſly, that it does not ſeem proper for a Shop Medicine.

PLAISTERS.

Emplaſtrum adhæſivum.

Sticking Plaſter.

Take of ſimple Diachylon, two Pounds; of Burgundy Pitch, a Pound; and melt them together, ſo as to make a Plaſter. *E.*

The Title of this Plaſter expreſſes the Uſes, which are generally only to preſerve Dreſſings on the Part.

The London Dispensatory directs an adhæſive Plaſter, under the Title of

Emplaſtrum commune adhæſivum.

The common ſticking Plaſter.

Take of the common Plaſter, three Pounds; of yellow Roſin, half a Pound: Throw the Roſin, firſt reduced to Powder that it may the ſooner melt, into the common Plaſter, melted with a very gentle Heat, and ſtir them well together. Otherwiſe,

While the Oil and Litharge are boiling together, add the Roſin a little before the Plaſter is finiſhed, and then boil all together to the proper Conſiſtence. *L.*

Emplaſtrum ex Ammoniaco cum Mercurio.

The Ammoniac Plaſter, with Quickſilver.

Take of Gum Ammoniac ſtrained, a Pound; of Quickſilver, three Ounces; of the ſimple Baſam of Sulphur, a Dram. Rub the Quickſilver with the Baſam of Sulphur, till it no longer appear; then add by degrees the Gum Ammoniac melted, a little before it is cold, and mix them carefully. *L.*

This ſeems a very well contrived Mercurial Plaſter. It is a high Reſolvent, and proper to be apply'd to indurated Parts, a Scirrhus, Tophs, and Nodes. But where this can be
of

of Service, perhaps a well contrived Mercurial Ointment would have a better Effect.

With the same View the *Edinburgh Dispensatory* directs the following Plaister:

Emplastrum Mercuriale.

Mercurial Plaister.

Take of Diachylon with the Gums, a Pound and a half: Melt it; then add eight Ounces of Quicksilver, an Ounce of *Venice Turpentine*, and an Ounce and a half of liquid Storax; which are to be first thoroughly mixed together in a Mortar, till the Quicksilver remains no longer discernible. *E.*

Emplastrum commune, cum Mercurio.

The common Plaister, with Quicksilver.

Take of the common Plaister, one Pound; of Quicksilver, three Ounces; of the simple Balsam of Sulphur, a Dram: Mix them together, after the same Manner as in the Ammoniac Plaister, with Quicksilver. *L.*

Emplastrum Anodynum.

Anodyne Plaister.

Take of white Resin, eight Ounces; of Tacamahac powder'd, and Galbanum, each four Ounces: When they are melted, add Cumin-seeds in Powder, three Ounces; black Soap, four Ounces: Make into a Plaister, according to Art. *E.*

This is a Discutient and Resolvent.

Emplastrum Antihystericum.

Antihysteric Plaister.

Take of Galbanum, twelve Ounces; of Tacamahac, and yellow Wax, each six Ounces; of *Asa Fatida*, four Ounces; of the Seeds of Cummin and *Venice Turpentine*, each four Ounces. Mix them to-

gether, and make a Plaister according to Art. *E.*

This may be apply'd to the Navel, or whole Abdomen, with very good Effect, in Hysteric Cases.

Emplastrum à Meliloto.

Melilot Plaister.

Take of the fresh Herb Melilot, six Pounds; bruise it well, put it into three Pounds of melted Beef-suet; boil them together till the Herb becomes almost crisp; then strongly press out the Suet, and add thereto eight Pounds of white Resin, and four Pounds of yellow Wax, boiling them a little together, so as to make a Plaister. *E.*

This is principally used for dressing Blisters.

Emplastrum attrahens.

Drawing Plaister.

Take yellow Rosin, yellow Wax, of each three Pounds; of tried Mutton-suet, one Pound: Melt all together, and strain the Mixture, while it remains fluid. *L.*

This is substituted for the Melilot Plaister.

Emplastrum Cephalicum.

Cephalic Plaister.

Take of *Burgundy Pitch*, two Pounds; of soft Labdanum, one Pound; yellow Rosin, yellow Wax, of each four Ounces; of that called the expressed Oil of Mace, one Ounce. The Pitch, Rosin, and Wax being melted together, add first the Labdanum, and then the Oil of Mace. *L.*

In the *Edinburgh Dispensatory* the Cephalic Plaister is thus directed:

Take of yellow Wax, three Ounces; white Resin, Tacamahac, each two Ounces; Myrrh and Castor, each two Drams; *Venice Turpentine*
D d d 2

tine, three Ounces; Chymical Oil of Lavender, and Oil of Amber, each a Dram. Mix, and make a Plaister, according to Art; but the Oils of Lavender and Amber are to be mix'd in, when the rest are taken from the Fire.

This seems a much better Plaister for the Purposes the Title expresses, than the preceding.

Emplastrum de Cicuta, cum Ammoniaco.

Plaister of Hemlock, with Gum Ammoniac.

Take of Gum Ammoniac, half a Pound; and dissolve it in a sufficient Quantity of Vinegar of Squills: Add to the Solution four Ounces of the Juice of the Leaves of Hemlock, strain the Whole, and boil it into a Plaister. *E.*

This is intended as a Discutient, and as such is used successfully.

Emplastrum à Cymino.

The Cummin Plaister.

Take of Burgundy Pitch, three Pounds; yellow Wax, Cummin-seeds, Caraway-seeds, Bay-berries, of each three Ounces. The Pitch and Wax being melted together, sprinkle into them the rest reduced to Powder, and stir all well together. *L.*

This is much recommended as a Discutient of Flatulences.

Emplastrum Defensivum.

Defensive Plaister.

Take of the Juice of Shepherd's-purse, Knot-grass, Horse-tail, Yarrow, Plantain, the greater House-leek, common Nightshade, and the greater Comfrey, each half a Pint; of Olive Oil, three Pints; of Hog's Lard, two Pounds; of Litharge of Gold, two Pounds

and a half; and of red Lead, half a Pound: Boil them up together almost to the Consistence of a Plaister, and dissolve therein of yellow Wax and white Rosin, each four Ounces; then add of Olibanum and Venice Turpentine, each four Ounces; as also the following Ingredients reduced to Powder, viz. of Bole Armentac, a Pound; of the greater Comfrey-root, Pomegranate-bark, Balau-stins, Mastich, Dragon's-blood, and red Saunders, each two Ounces: Mix them, and make thereof a Plaister according to the Rules of Art. The Plaister may also be made without the Juices. *E.*

This is an Astringent.

Emplastrum Diachylon simplex.
Simple Diachylon.

Take of the Oil of Mucilages, four Pounds; of Litharge of Gold, a Pound and a half; and boil them up to a Plaister. *E.*

This is esteem'd an Emollient, Digestive, Maturant, and Resolvent.

Emplastrum commune.
The common Plaister.

Take of Olive Oil, one Gallon; of Litharge, finely powder'd, five Pounds: Boil them together with about a Quart of Water, over a gentle Fire, continually stirring, till the Oil and Litharge are united, and they acquire the due Consistence of a Plaister; and if the Water is wasted, before the Operation is over, more Water must be poured on hot. *L.*

This is substituted for the *Diachylon simplex*.

Emplastrum Diachylon cum Gummi.
Diachylon with Gums.

Take of the Oil of Mucilages, four Pounds; of Litharge of Gold, two Pounds; and boil them to the

the Consistence of a Plaister, then add thereto of Gum Ammoniac, Galbanum, Venice Turpentine, and yellow Wax, each half a Pound, and boil them into a Plaister according to Art. *E.*

This very powerfully digests, matures, and resolves.

Emplastrum commune cum Gummi.

The common Plaister, with Gums.

Take of the common Plaister, three Pounds; of Galbanum strained, eight Ounces; common Turpentine, Frankincense, of each three Ounces. To the Galbanum and Turpentine melted together with a gentle Heat, sprinkle in the Frankincense reduced to Powder, and then gradually add to them the Plaister first melted, likewise with a very gentle Heat. Otherwise,

Instead of the common Plaister finished, make Use of the Oil boiled with Litharge, as soon as they are joined, and not yet brought to the Consistence of a Plaister. *L.*

This is substituted for the *Diachylum cum Gummi.*

Emplastrum Diapalmæ dictum.

Diapalma.

Take of Litharge of Gold, and of Olive Oil, each three Pounds; of Hogs Lard, two Pounds, and boil them together, keeping them continually stirring, till they become a Plaister. To which, if there be added four Ounces of burnt *Chalcitis*, or calcined white Vitriol, it becomes the *Emplastrum Diachalciteos*, or Vitriol Plaister. *E.*

Emplastrum Epispasticum.

Blistering Plaister.

Take of Melilot Plaister, and Burgundy Pitch, each eight Ounces; of Venice Turpentine, three Ounces; Cantharides, five Ounces. Mix them together, and make

them into a Plaister, according to Art; but observe to reduce the Cantharides to a very fine Powder, and add them to the other Ingredients, first melted together. *E.*

Emplastrum Epispasticum.

The compound blistering Plaister.

Take of Grecian Pitch, ten Ounces; yellow Wax, four Ounces; white Resin, two Ounces; melt them together, and add, of Venice Turpentine, eighteen Ounces. Melt all together, and whilst hot, sift in the following Ingredients, first reduced to a fine Powder, and mix'd together, continually stirring them in, viz. Mustard Seed, and black Pepper, each an Ounce. Verdigrise, two Ounces; Cantharides, twelve Ounces. Make a Plaister. Both this and the preceding, are to be kept in Bladders, anointed with Oil.

Emplastrum Vescatorium.

Blistering Plaister.

Take of the drawing Plaister, two Pounds; of Cantharides, one Pound; of Vinegar, half a Pint. The Plaister being melted, a little before it hardens, sprinkle in, and mix the Cantharides, reduced to a very fine Powder; then add the Vinegar, and beat all well together. *L.*

The three last Plaisters are intended to raise Blisters only; and either will answer that Purpose very well. But I must remark, that when Applications are made to the Feet, with an Intent to stimulate strongly, excite Pain therein, and relieve the Head, Cataplasms composed of equal Parts of scraped Horie Radish, and powdered Mustard Seed, moisten'd with old Yeast, and very sharp Vinegar, will answer the Design more expeditiously, strongly, and with much better Effect, than any Application

in which Cantharides is an Ingredient.

Emplastrum de Minio simplex.

Simple red Lead Plaister.

Take of red Lead, a Pound; of Olive Oil, a Pound and a half; and of Vinegar, half a Pint; and boil them together over a slow Fire, so as to make a Plaister. *E.*

Emplastrum è Minio.

Red Lead Plaister.

Take of Olive Oil, two Quarts; of red Lead finely powder'd, two Pounds and a half. With these the Plaister is to be prepared in the same Manner as the common Plaister, only here more Water is required, and more Caution, that the Plaister may not be burnt, and turn black. *L.*

These are said to be good for drying and cicatrizing.

Emplastrum de Minio cum Sapone.

Red Lead Plaister, with Soap.

This is made by adding to the simple red Lead Plaister, when taken off the Fire, whilst it yet remains hot, after the Exhalation of the Moisture, half a Pound of Venice Soap, thin sliced, and stirring them forcibly together, so as to dissolve the Soap, and make a Plaister according to Art. *E.*

The Soap in this Plaister renders it very resolvent. It is apply'd sometimes to Arthritic Tumors and Strains.

Emplastrum è Sapone.

Soap Plaister.

Take of the common Plaister, three Pounds; of hard Soap, half a Pound. To the common Plaister liquefied, add the Soap, then melt all to the Consistence of a Plaister, and take particular Care that it

does not grow too cold before it is formed into Rolls. *L.*

Emplastrum è Mucilaginitibus.

Plaister of Mucilages.

Take of yellow Wax, fourteen Ounces; of the Oil of Mucilages, eight Ounces in Measure; of Gum Ammoniac strained, half a Pound; of common Turpentine, two Ounces. The Gum Ammoniac being melted with the Turpentine, add to them gradually the Wax melted with the Oil in another Vessel. *L.*

The *Emplastrum è Mucilaginitibus*, is principally us'd as a Suppurative. But I am inclin'd to believe the Mucilages mix'd with something oily to keep them from drying, will have a better Effect.

Emplastrum Oxycroceum.

Oxycroceum.

Take of yellow Wax, one Pound; common Pitch, and Galbanum, each half a Pound; melt them over a gentle Fire, and add of Myrrh, Olibanum, and Venice Turpentine, each two Ounces. Mix all together, and make a Plaister according to Art. *E.*

It is esteem'd a Resolvent, and is said to fortify the Nerves and Muscles, and to relieve Pain.

Emplastrum Roborans.

Strengthening Plaister.

Take of the common Plaister, two Pounds; of Frankincense, half a Pound: of Dragon's Blood, three Ounces. To the common Plaister melted, add the rest reduced to Powder. *L.*

The Title expresses the Intention of this Plaister.

Emplastrum Stomachicum.

Stomach Plaister.

Take of yellow Wax, eight Ounces ; Tacamahac powder'd, four Ounces. When melted together add the following Ingredients reduced to Powder, *viz.* Venice Turpentine, six Ounces ; of Bay Berries, powder'd, two Ounces ; of Cubebs powder'd, an Ounce ; expressed Oil of Mace, an Ounce and half ; chymical Oil of Mint, two Drams. Mix them, and make thereof a Plaister according to Art. E.

This is prepar'd in a different Manner, in the *London Dispensatory*, thus :

Take of soft Labdanum, three Ounces ; of Frankincense, one Ounce ; Cinnamon, expressed Oil of Mace, so called, of each half an Ounce ; of essential Oil of Mint, one Dram. Add to the Frankincense melted, first the Labdanum, a little heated, till it is become soft, and then the Oil of Mace, afterwards mix in the Cinnamon with the Oil of Mint, and beat them together in a warm Mortar into a Mass, which is to be kept in a Vessel well closed. L.

Both these are intended as warm and cordial Applications to the Stomach ; and exert very considerable Effects, when such Things are wanted.

Emplastrum Volatile.

Volatile Plaister.

Take of Venice Turpentine, an Ounce ; grind it in a Mortar, gradually pouring thereto an Ounce of Spirit of Sal Ammoniac, and when they are thoroughly incorporated, add to them, by Degrees, half an Ounce of Tacamahac in Powder, and mix them together, E.

This seems intended as a very stimulating Resolvent.

C E R A T E S.

Ceratum album.

White Cerate.

Take of Olive Oil, four Ounces in Measure ; of white Wax, four Ounces in Weight ; of Sperma Ceti, half an Ounce in Weight. Melt all together, and stir them well till the Cerate is quite cold. L.

This differs from the white Ointment, and Liniment, only in Consistence.

Ceratum citrinum.

Yellow Cerate.

Take of yellow Basilicum, half a Pound ; of yellow Wax, an Ounce. Melt them together. L.

This differs from the yellow Basilicon only in Consistence.

Ceratum Epuloticum.

Cicatrizing Cerate.

Take of Olive Oil, a Pound ; yellow Wax, prepared Calamy, of each half a Pound. Melt the Wax with the Oil, and as soon as the Mixture begins to congeal, sprinkle in the Calamy, and stir all well, till the Cerate is quite cold. L.

This seems to be intended to imitate Turner's Cerate.

Ceratum Mercuriale.

Mercurial Cerate.

Take yellow Wax, tried Hogs Lard, of each half a Pound ; of Quick-silver, three Ounces ; of the simple Balsam of Sulphur, a Dram. Melt the Wax with the Lard, then add them gradually to the
D d d 4 Quick-

Quicksilver, first well divided by the Balsam of Sulphur.

The Uses of this may be known from those of the Quicksilver, which enters its Composition.

E P I T H E M S.

Epithema Vescicatorium.

Blistering Epithem.

Take of Cantharides reduced to a very fine Powder, and of Wheat Flower, equal Weights. With a sufficient Quantity of Vinegar, make them into a Paste. *L.*

Epithema volatile.

Volatile Epithem.

Take equal Weights of common Turpentine, and of Spirit of Sal Ammoniac. Stir the Turpentine in a Mortar, and gradually drop in the Spirit, till the whole is reduced to a white Mass. *L.*

This should seem to be a strong stimulating Resolvent.

Cataplasma à Cymino.

Cummin Cataplasim.

Take of Cummin Seeds, half a Pound; Bay-berries, the Leaves of Water Germander dried, *Virginia* Snake Root, of each three Ounces; of Cloves, one Ounce, with Honey equal to thrice the Weight of the Species powder'd, make a Cataplasim. *L.*

This is substituted for the *Tberiaca Londinensis*, and is a very warm Topic, of considerable Use, when Heat is to be excited in any Part.

Cataplasma discutiens.

The discutient Cataplasim.

Take of Bryony Root, two Ounces; the Root of common Flower *de Luce*, one Ounce; the Flowers of Chamomile and Elder, each half

an Ounce; Spring Water, a sufficient Quantity; boil them till they are tender, then bruise them well, and add, of Gum Ammoniac, dissolv'd in Vinegar, half an Ounce; crude Sal Ammoniac, two Drams; camphorated Spirit of Wine, one Ounce. Mix into a Cataplasim. *E.*

This seems an excellent Cataplasim for the Purposes express'd in the Title.

Cataplasma maturans.

Maturing Cataplasim.

Take of dried Figs, four Ounces; of yellow-Basilicum, one Ounce; of strained Galbanum, half an Ounce. Beat well the Figs with a little Wine or strong stale Beer; then carefully mix in the Ointment, first melted with the Galbanum. *L.*

The Title expresses the Uses.

Cataplasma suppurans.

The suppurating Cataplasim.

Take of white Lilly Roots (or those of Marsh Mallows) four Ounces; of fat Figs, one Ounce. Boil in a sufficient Quantity of Spring Water, till they are tender, bruise them well, and add, of crude Onions bruise'd, six Drams; Galbanum, dissolv'd in the Yolk of an Egg, half an Ounce; of the *Unguentum Basilicon*, and Oil of Chamomile, each an Ounce; the Meal of Linseed, a sufficient Quantity. Mix and make a Cataplasim.

The Title expresses the Intention, for which it seems excellently calculated.

Sinapismus simplex.

The simple Sinapism.

Take of Mustard Seed bruise'd, and the Crums of Bread, each equal Parts; of the sharpest Vinegar, a sufficient Quantity. Mix, and make a Cataplasim.

Sina-

Sinapismus compositus.

Take of Mustard Seed bruis'd, and the Crums of Bread, each two Ounces; bruis'd Garlic, half an Ounce; black Soap, one Ounce; the best Vinegar, enough to make a Cataplasim.

Both these stimulate very powerfully. See the Notes to the *Emplastrum Vesicatorium*.

Coagulum Aluminosum.

Alum Curd.

Take of the White of an Egg at

Pleasure, and stir it in a Pewter Vessel, with a sufficient Lump of Alum, till it is coagulated. L.

This is a very good astringent Epithem. I have known it apply'd to inflam'd, or over moist Eyes with very good Effect, receiv'd upon a little Tow. But it will sometimes excite Pains; and in this Case it must be discontinued; for nothing is more prejudicial to the Eyes, than Applications which give Pain.



A NEW

English Dispensatory.

B O O K V.

CHYMICAL MEDICINES.

C H A P. I.

CHYMICAL PREPARATIONS of VEGETABLES.

Distill'd OILS,

Oleum Absinthii.

Oil of Wormwood.

TAKE any Quantity of the Plant of Wormwood, moderately dried in the Shade, and cut to pieces; as much

Spring Water as will commodiously keep it a-float, and a proper Quantity of Sea Salt to give the Liqueur a tolerable Sharpness; let them steep together for for eight Days, then distill them by the Alembic, with a somewhat smarter Fire, than what is usual in the Distillation of Waters, and afterwards separate the Oil from the Water, according to the Rules of Art. E.

In the same Manner are distill'd,

<i>Oleum Hyssopi.</i>	Oil of Hyssop.
<i>Majoranae.</i>	Marjoram.
<i>Menthae.</i>	Mint.
<i>Origani.</i>	Origany.
<i>Pulegii.</i>	Penny-royal.
<i>Roris Marini.</i>	Rosemary.
<i>Rutae, &c.</i>	Rue, &c.
<i>Florum Chamæ-</i>	Flowers of
<i>meli.</i>	Chamomile.
<i>Lavendulae, &c.</i>	Lavender, &c.
<i>Seminum Anisi.</i>	Seeds of Anise.
<i>Carni.</i>	Caraway.
<i>Cumini.</i>	Cummin.

<i>Oleum Fœniculi, &c.</i>	Fennel, &c.
<i>Corticis Limonum.</i>	Lemon Peel.
<i>Caryophyllorum.</i>	Cloves.
<i>Cinnamomi.</i>	Cinnamon.
<i>Macis.</i>	Mace.
<i>Nucis Moschatæ.</i>	Nutmeg.
<i>Ligni Sassafras.</i>	Sassafras Wood.

But observe that all the *Seeds* and *Spices* ought to be bruised, before they are set to steep. E.

All Manner of unctuous *Vegetables* will afford their Oil by this Treatment, provided the Time of Digestion be suited to the Strength and Texture of the Subject. The tenderest Plants scarce require any Maceration at all, those of a soft and yielding Nature require one, two, or three Days; and the viscous ones of as many Weeks. The longer the Maceration is continued, the larger Quantity of Sea Salt is to be added, instead whereof may be used *Nitre*, or any *fixed acid Spirit*; the Water separated may be employed to Advantage in future Distillations. E.

Distilled and Essential Oils, are order'd to be prepared in the *London Dispensatory*

From the Root of Sassafras;
From the Leaves of Sweet-Marjoram,
Wild.

Wild-Marjoram,
Pepper-Mint,
Spear-Mint,
Penny-Royal,
Rosemary,
Rue,
Savine,
Wormwood;

From the Flowers of Chamomile,
Lavender;

From the Seeds of Anise,
Caraway,
Cummin,
Dill;

From Juniper-Berries,

From the Spices,

Cloves,

Nutmeg, and others.

These Oils are obtained by Distillation, with an Alembic and large Refrigeratory. Water must be added to the Materials in sufficient Quantity to prevent their Burning, and the Subject must be macerated in that Water a little Time before the Distillation. The Oil comes over with the Water, and either swims on the Top, or sinks to the Bottom, according as it is heavier or lighter.

The Virtues of all these Oils may be learn'd from those of the Vegetables from whence they are distill'd.

Oleum Baccarum Juniperi.

Oil of Juniper.

Take any Quantity of bruised Juniper-berries, half their Weight of Spring Water, and a small Proportion of Yeast. Let them stand together for some Days to ferment, but not too long, and then add a sufficient Quantity of Spring Water, and distil the whole by the Alembic, separating the Oil, according to Art from the Water.

After the same Manner are distilled the Oils of Bayberries, and other Berries of that Kind; the Oils of Savin, and other Plants of that Nature; and indeed all the Oils of viscous Subjects, or those of a close Texture. *E.*

Boerhaave tells us, that essential aromatic Oils have almost an inimitable Virtue, intirely depending upon the Spirit, which is sharp, inflammatory, grateful, refreshing, heating, attenuating, and stimulating to the animal Spirits, and nervous Fibres; and by these Properties the Oils proves serviceable in cold, aged, watery, and phlegmatic Constitutions; and again, in cold Intermittents, moist and cold hypochondriacal and hysterical Cases, or other Diseases proceeding from cold, acid, or aqueous Flatulences in the Intestines; and, when prudently used in these Cases, they prove generally powerful and safe Medicines; but, when indiscreetly applied in Distempers attended with violent Heat, Motion or Inflammation, they prove poisonous. The Chymists have prudently observed, that these Oils act by Means of their Spirits, which, as lodged in the Oil, come to be applied to the Parts of the Body, so as there to produce their proper Actions, which would otherwise easily be lost thro' their extreme Volatility; and, when both the Oil and the Spirit act together, the Effect is more gentle, but more lasting. These Spirits, therefore, have, and communicate to the Oil, a certain Acrimony, which gives the Sensation of Fire to the Tongue, and presently occasions Pain; and the like Effect it shews when applied to the naked Nerves; When applied to the external Skin, they soon occasion the whole Series of an Inflammation, and end in a gangrenous Eschar. If applied to the Lips, or the internal Parts of the Nose or Palate, where the Nerves lie bare, it occasions the same, with great Violence, and presently brings on dangerous Inflammations. Whence we easily see, what Effects they may produce upon the Mouth, Throat, Stomach, and Intestines, when imprudently exhibited. Hence these

Oils

Oils may justly be called inflammatory; tho' 'tis observed, there is no better Remedy for immediately raising the Spirits, by their grateful and extraordinary Virtue, which can scarce be explained, for want of general Principles, otherwise than by direct Experiment. They have not only this refreshing, but also an heating Virtue; for if externally applied, or internally taken, they immediately begin to heat the Parts of the Body, and presently increase this Heat thus once begun; but the colder and more languid the Body, the less they heat it, and *vice versa*; so that, when rubb'd upon a dead Carcass, they produce no Heat at all: Whence it is highly dangerous to give them in a burning Fever. They also increase the Motion of the Nerves by Irritation, propelling the Spirits, and, perhaps, agreeably warming them both; and whilst they perform all this, they attenuate and dissolve Viscidities, so far as can be done by increasing the Motion of Circulation. They have, however, besides these, other Virtues no less considerable, and peculiar to each. Thus the Oils of the *Arbor Vitæ*, and of Savine, are powerful Emmenagogues, where the Stoppage of the menstrual Discharge arises from a languid Circulation. The essential Oil of Rue is of Service in the Epilepsy, from a cold relaxed State of the Nerves; and, also, in hysterical Disorders from a cold Cause; that of Juniper Berries, in the cold Scurvy, and the Pains and Heaviness thence proceeding; and, also, in nephritic Complaints, from cold Obstructions: That of Mint, in an almost paralytic Weakness of the Stomach; that of Lavender in the Palsy, Vertigo, Lethargy, and other cold Disorders of the Head: The fragrant un-inflammatory Oil of Roses, is a noble Reviver of the languid Spirits; that of Cinnamon,

very advantageous in a Deficiency of Spirits without Inflammation, either during the Periods of Pregnancy, Delivery, or immediately afterwards, if at the same Time there be no Rupture of the Vessels: Those of Wormwood, *Cardius Benedictus*, the lesser Centaury, Chamomile, and Tansey, are useful against Worms; for which Purpose they may be formed into Pills with Crums of Bread, and given in a sufficient Dose upon an empty Stomach, the Patient refraining from all Kind of Aliment for two Hours afterwards: Those of Baum and Lemon-peel, in Palpitations of the Heart, from cold phlegmatic Humours; and those of Marjoram, Rosemary, and Sage, in Obstructions and mucous Discharges of the Uterus, from a cold Cause.

If these Oils be strongly ground for a considerable Time, with thrice their own Weight of pure and dry Sea Salt, so as to divide them well, and then again distilled with Water, they become clean, pure, and limpid, or freed from their mucilaginous, or gummy Part, and fitter for keeping, if put up into Glass Vessels having close Necks well fitted with ground Glass Stoppels, and set in a dry cold Place: But they lose of their Quantity by this Rectification, much gross Matter remaining behind in the Still, unable to ascend by Reason of its Tenacity. Their Virtues, also, are lessened, which depend upon their Spirits, because these remain in the Water used in the Distillation, and are also dissipated in the Water which comes over. This Mr. *Homburg* shews, by a laborious and instructive, tho' dear Experiment; for, upon distilling such an Oil, with fresh Water every Time, six and twenty times over, he at length obtained a fourth Part thereof; the other three Fourths becoming an insipid, tenacious Substance, whilst the Water, four and twenty

twenty times cohobated with the Oil, was rendered exceeding sharp, aromatic, saline, or spirituous.

When these pure Oils are, without Addition, distilled in a Glass Retort, with a Fire gradually increased, they always exhale some Water, and afterwards become more clear, liquid, penetrating, and light; leaving at the Bottom of the Retort, after the Distillation is performed by a strong Heat, a black, fixed, spongy terrestrial Matter: And if the Operation be thus several Times repeated, the greatest Part of the Oil will be converted into what the Chymists call *Caput Mortuum*. The excellent Mr. Boyle, by this Means, reduced a Pound of essential Oil almost wholly to Earth.

They who have distilled these Oils from pure Chalk, in clean Vessels, have found that by cohobating five Ounces of Oil eight Times upon fifteen Ounces of Chalk, it afforded only two Ounces and one Dram of Oil, two Drams and forty-five Grains of Salt, and half an Ounce of a strongly saline Water, containing the volatile Salt of the Oil, according to the Observation of Mr. Bourdelin.

Again, these Oils distilled from Lime slacked in the Air, and afterwards made exceedingly dry, are so changed, that a Pound of Oil being six times distilled, in the Way of Cohobation, upon fresh Quantities of Lime, with an extreme Degree of Fire, there came over fifteen Ounces and a half of Water, and one Ounce of Oil, according to the Observation of Mr. Homberg. Hence these Oils are found to consist chiefly of elementary Water and Earth, a little Oil, Spirit and Salt, and therefore grew from the Union of those different Principles by the Action of the Fire: Whence Oil is not a simple elementary Body, but a Compound of several others. But whether this be really the Case, or whether

Experiments may shew, that these Oils are rather transmutable, I do not take upon me to determine.

This may be said with greater Certainty, that the more excellent of these Oils being dissolved in high rectified Spirit of Wine, digested and distilled with a gentle Fire of one hundred Degrees, give out their native Spirit to the Spirit of Wine, leaving a tenacious oily Matter behind; which being again treated in the same Manner with fresh Spirit of Wine, affords more; and thus, at last, remains an indolent, scentless, insipid, thick, and tenacious Body of Oil; perfectly deprived of all its Spirit: And if even pure Water be long shook with these Oils, it takes to itself their Spirit, becomes rich therewith, and thus robs the Oil of its Virtue; so that if the Operation be often repeated, it at length leaves the like indolent Remainder as the Spirit of Wine. And hence we are furnished with excellent Preparations, and learn, that these Oils are separable into Spirit and Oil, a little Salt, much Water, and much Earth; at least, that these are producible from them by Distillation. But nothing here seems stranger than that Water should remain so tenaciously mixed with these Oils, as not to be separated from them by Distillation twenty times repeated.

Hence it is confirmed by this, that the peculiar Taste and Odour of Plants wholly reside in their native Spirit: That the Taste and Odour of distilled aromatic Waters are solely owing to this Spirit, as peculiar to each Plant: That essential Oils, also, have their respective Characteristics from these Spirits alone: That the volatile Oil of Plants chiefly serves for detaining these Spirits, and the fixed Oil for connecting the solid Parts together; whence the Difference of these two Oils is very great: That both the expressed and distilled

Oils are natural in the Plants themselves. And, that the Difference of Oils is principally owing to their Spirits.

Frederic Hoffman's Remarks on Essential Oils.

It frequently happens that Oils in Distillation, are yielded either too acrid, or of too deep a Colour; especially if they are urged by too strong a Fire; and this is principally to be observed, when those Herbs, which abound with a large Quantity of a crid Salt, such as Thyme, Savory, Marjoram, and *Cretan* Origanum, are subjected to Distillation; for if the Distillation is accelerated by too brisk a Fire, the Oils not only lose their grateful Smell, but also acquire a brownish or reddish Colour, which by no Means happens, if the Distillation is carried on by a moderate Fire.

Hence we learn, that excessive Heat is of great Efficacy in changing the Texture of Oils: And this Observation is applicable to the human Body, since we see, that by the intense Heat in Fevers, the temperate and sulphureous Parts of the Blood and Humours are surprizingly agitated; so that it is not to be wondered at, if the oleous and temperate Principle of the Blood is converted into an highly saline sulphureous Matter, which being discharged by Stool and Urine, renders the Fæces bilious and yellow, and the Urine intensely red.

It is not to be doubted, but if right Measures are taken, those Oils which by too intense an Heat in Distillation, have in a great Measure, lost their grateful Taste, their Fragrance, and their Colour, may, by Rectification, be reduced to a due Degree of Perfection: But if the Rectification is attempted by putting the Oils in a Glass Retort, and carrying on the Distillation by a Sand

Heat, we find ourselves deceived, since, by this Means, these Oils have an ungrateful empyreumatic Smell, and are so far from acquiring their due and grateful Sweetness, that they are rather rendered more acrid. The Rectification is therefore to be made in another Manner: Those Oils, for Instance, are to be mixed with common Salt, with which they are to be strongly triturated, taking three Parts of Salt to one of Oil: Then adding a sufficient Quantity of Water, the Rectification is to be made from an Alembic, by which Means there is yielded an Oil far clearer, and of a more grateful Colour; and what is surprizing is, that in the Bottom of the Alembic there is found a thick black Mass, which firmly adheres to the Hands, and the Quantity of which is the greater, the thicker and deeper colour'd the Oils are: I have often observed, that Oil of Marjoram contained more of this resinous Substance than other Oils, since an Ounce of it generally affords a Dram of such a Substance: The Oils of Mint, Spike, and Lavender, thus treated, do not leave so great a Quantity of Resin; but the Oils of Thyme and Savory afford a large Quantity of it: We also find that such Oils as are of a gross Consistence, yield a large Quantity of this Resin.

This Experiment sufficiently evinces, that Oils are nothing but subtile and liquid Refins, closely united with Phlegm, and some ethereal Spirit; as also that those Oils are hottest which contain the largest Quantity of Resin: For which Reason such Oils should always be cautiously prescrib'd internally by the Physician, because all subtile oleous Substances induce an intense and long-continuing Heat on the Humours of the human Body.

It is also to be observed, that Oils rendered more limpid by this Rectification, are not so soon dissolved by rectified

rectified Spirit of Wine as they were before; but for this Purpose they require highly rectified Spirit of Wine, since they are formed into small Globules, and with great Difficulty incorporated with common Spirit.

It is also certain from Experience, that ethereal, limpid, and fragrant Oils become thicker by Age, and lose a great deal of their Fragrance; and, if we want to restore this Fragrance, we must infuse them with recent Herbs and Leaves, and reiterate the Distillation from an Alembic; by which means they are again impregnated with that subtle, sweet, and spirituous Principle, which they had lost by excessive Age.

From this Experiment we learn, that, besides a sulphureous, saline, earthy, or aqueous Principle, there is also another in Oils, which the Antients called Spirits, which is highly active, of a thin, ethereal Substance, and necessary to preserve the natural Crasis and Texture of the Oil.

This Spirit is principally disposed to Evaporation, by the Heat of the Air; and when this Spirit is lost, we find that the Oil is greatly changed in its Consistence, Smell, Taste, and Virtues. If, therefore, we intend to preserve Oils, we must not only carefully stop the Vessels which contain them, but also deposite them in cold Places, so that the Spirit being pent up in them, their Texture may remain entire.

Because the Air, especially when hot, induces a greater Change on the Nature of Oils, and the Quality of the oleous Mixture, than any thing else, whilst by long acting upon them, it deprives them of their grateful Taste and Smell, and inspissates them; the express'd Oils tending to a rancid State; and those distill'd to a terebinthinaceous Nature; the Colour also being in some greatly changed. Hence Oils are carefully

to be preserved from the free Access of an hot Air, which may be done by filling the Vessels in which they are kept, allowing only a small Space for Rarefaction, lest, upon the Approach of Heat, they should burst. They are also to be carefully stop'd, and put into cold and dry Places.

Some, in order to preserve Oils, add some Water; such, for Instance, as distill'd Rose-water, which is of excellent Service, when there is not Oil enough to fill the whole Glass; since the Water, by its Exhalation, keeps the Consistence of the Oil thin, and hinders it from being inspissated.

It is also certain, from Experience, that Oils can never be intimately united and incorporated with Water; but these Substances, naturally immiscible, may by Art be so mixed, as not to be separated from each other. This is most commodiously done by pouring a few Drops of any aromatic Oil on Sugar, then putting it into Water, and shaking it; by which means the whole Oil, in a Moment, enters the Pores of the Water. Thus we may, in an extemporaneous Manner, prepare the Waters of Cinnamon, Cedar, Nutmeg, Mint, Baum, and Hyssop, which are otherwise to be only obtained with considerable Labour by Distillation. Besides, by the Addition of a small Quantity of Spirit of Wine, these Waters become spirituous.

It is an opprobrious, tho' true Assertion, that the true and genuine Oils of Plants are rarely to be had in the Shops; since, in order to increase their Quantity, it is customary, in distilling them, to mix them with some pinguous or other Substances of little Value. As for the dear Aromatic Oils it is certain, from Experience, that they are almost all adulterated, as is obvious in the Oils of Cinnamon, Cloves, Nutmegs, and Mace. But in these the Fraud is easily

fly detected by pouring *Alcohol* of Wine, or highly rectified Spirit of Wine, upon them; for this Liquor immediately resolves, and imbibes the Particles of the purer Oil, leaving in the Bottom a large Quantity of expressed Oil, either of Almonds, or Ben-nuts. But the more skilful of the Chymists have an artful Method of concealing this Piece of Fraud; for they dissolve pure Oil of Cinnamon, or Cloves, by adding an equal Quantity of highly rectified Spirit of Wine, which may be so prepared, that one Part of the Spirit may absorb one Part of the Oil, whilst the Taste remains, and the Smell continues sufficiently strong and penetrating; so that the Imposition is with Difficulty discovered. But this Piece of Fraud is also quickly discovered, if these Oils are poured into common Water; for then the Water immediately becomes milky, which Effect is not produced by pure Oil, when put into cold Water, and left to itself. There is still another Method of adulterating the Oils of Plants, by mixing Oil of Turpentine, or Pine, with the Herbs to be distill'd; and this Piece of Fraud is most commonly committed in preparing Cephalic Oils from Plants, which abound with a balsamic Resin, such as Mint, Oreganum, Sage, Rosemary, Marjoram, Savory, Thyme, Mother of Thyme, and the Flowers of Spike and Lavender; from which, by the Addition of these Oils, they obtain a large Quantity of Oil, tho' of a bad Kind, and inconsiderable Virtues; But such Oils, if the Plants are recent, retain their specific and distinguishing Taste and Smell. But this Piece of Fraud is easily detected; for if such Oils are kept for some time, they lose their grateful Smell, and the disagreeable Odour of the Turpentine remains. But there is still a more expeditious Method of

discovering this Fraud; for if a Piece of Cloth, macerated in such Oil, is put in a warm Place, or exposed to an hot Furnace, the subtile Fragrance is immediately exhaled, and the Smell of Turpentine discovers itself.

Besides, the Cephalic Oils, adulterated with Turpentine, or Oil of Pine, are more limpid than the genuine Oils, which are of a deeper Colour. There is also another Method of detecting this Fraud; which is, when the Letters of the Signature, put upon the Mouth of the Glass, become successively pale, which does not happen with the genuine Oils; for the Effluvia of the Turpentine contain a subtile Acid, which in Process of Time, destroys the Colour of the Ink. Some, in the Distillation of these Oils, instead of Turpentine, add Seeds, which contain a large Quantity of pinguious Juice; such as those of Poppies; and by this means that thick Oil, which at other Times is generally express'd, with Difficulty passes the Helm, is raised and distilled in Conjunction with a Portion of subtile and æthereal Oil; and this is the usual Method of adulterating the Oil of Rue; for tho' Rue is of a strong Taste, and penetrating Smell, yet there is hardly any Plant which affords a smaller Quantity of Oil. But pure Oil of Rue is easily distinguished from that which is adulterated; since, when genuine, it does not become thick and coagulated, when exposed to the Cold; but is inspissated, when it is adulterated with any express'd Oil. The Oils of Chamomile, and the Tops of Yarrow, when pure and recent, are of a beautiful bluish Colour, which is afterwards changed into that of brown; but if this bluish Colour of the Oil of Chamomile-flowers remain above a Year, it is a sure Sign that it is adul-

adul-

adulterated; for it is customary to mix with it Oil of Turpentine, which is of a deep-bluish Colour, on Account of the Tincture it receives from the Copper of the Vessel. It is of great Importance to the Physician, to be able to distinguish genuine from adulterated Oils; for these balsamic and cephalic Oils not only lose much of their Efficacy, but also acquire a foreign Quality, by being adulterated; and it is sufficiently known, that all terebinthaceous Substances violently exagitate the Mass of Blood and Humours, and create an intense Heat in the Body.

Oleum Terebinthinæ.

Oil of Turpentine.

Take of any Quantity of Turpentine, melted over a gentle Fire, and pour it into a Glass Retort, so as to fill one Half thereof; then, sitting on the Receiver, distil in a Sand-heat, and with a gentle Fire: There will come over an acid Spirit; then, the Fire being gradually increased, a limpid Oil, commonly call'd Æthereal Spirit; and at length a yellow Oil, leaving the Colophony at the Bottom; which, being urged with the last Degree of Fire, will also afford a red and dusky-red Oil, that falls thro' the other Liquors to the Bottom of the Receiver. E.

The Gums Ammoniac,

Caranna,

Elemi,

Galbanum,

Sagapenum,

Storax,

Tacamahac, &c.

distill'd in the same Manner, afford an acid Liquor and an empyreumatic Oil.

Turpentine, distill'd by the Alembic, with four times its own Quantity of Water, yields a limpid Oil,

leaving the Colophony behind, after the Evaporation of all the Water, which may be kept for Use; or may be distill'd by the Retort, by which means it affords a yellow, a red, and a dusky-red Oil. E.

In the London Dispensatory the Distillation of Turpentine is directed much as before; thus,

Turpentine is to be distill'd with Water in a Copper Still, like the essential Oils of Vegetables. L.

After the Distillation, the yellow Rosin remains in the Still.

This Oil is often, tho' improperly, called Spirit of Turpentine.

Oleum Terebinthinæ Æthereum, & Balsamum.

The Æthereal Oil, and the Balsam of Turpentine.

Let the Oil of Turpentine be distill'd in a Retort, with a very gentle Heat, till what remains is become of the Consistence of a Balsam.

Balsam of Turpentine may also be distill'd from yellow Rosin; whence after a Portion of Oil, which must be removed in time, will come a thick Balsam; a blackish Rosin remaining in the Retort, which is called Colophony. L.

The Æthereal Oil of Turpentine has of late Years been much recommended for a Sciatica, taken in large Doses in Honey, or any other convenient Vehicle.

Oleum Guaiacæ.

Oil of Guaiacum.

Take any Quantity of Guaiacum-Chips, put them into a Retort of Earth or Glass, and gradually distil them in a naked Fire, or a Sand-Furnace: An acid Liquor will first ascend, then a light-red Oil; and at length, with the utmost Degree of Heat, a thick black Oil, that sinks thro' the other

other Liquors to the Bottom of the Retort.

In like manner Oils are distill'd from any Kind of Wood. *E.*

This acid Water of *Guaiacum* is highly penetrating, aperitive, attenuating, healing, detergent, and saponaceous, so as to prove antiscorbutic, diuretic, diaphoretic, and sudorific, especially after being well purified and rectified.

Oleum Capaivæ compositum.

Compound Oil of Balsam of Capaiva.

Take Balsam of Capaiva, two Pounds; of Gum Guaiacum, four Ounces: Distil them together in a Retort. *L.*

It is doubted whether the Guaiacum adds any Virtues to the Capaiva. This Oil is an excellent Balsamic, and is likely to do Good in all those Cases where Tar-water can be of Service; but should seem to be a much better Medicine than the latter.

Oleum Buxi.

Oil of Box.

Distil Pieces of Box in a Retort, with a Fire gradually raised: The Oil will come over with an acid Spirit, from which the Oil is to be separated by a Funnel. *L.*

See the Article *Buxus*, in the *Materia Medica*.

Flores Benzoini.

Flowers of Benjamin.

Take any Quantity of powder'd Benjamin, and put it into a glazed Pot, and fit a Cone of Paper to the Brim thereof; then administer a slow Fire, that the Flowers may sublime; and repeat the Operation till the Paper becomes foul with the ascending Oil. *E.*

These are said to be a wonderful Pectoral, and particularly excellent in Asthmas; for they gently attenuate, and open the viscous Obstructions, and cleanse the Bronchia. They are convenient almost in any Form, and give a very grateful Scent to any Composition. The Dose is from three to ten or twelve Grains.

In the *London Dispensatory* we find the following Directions, with respect to the Flowers of Benjamin:

Put powder'd Benjamin into an earthen Pot placed in Sand, and, with a small Heat the Flowers will rise, and may be caught by a Paper Cone placed over the Pot. Or else,

The Benjamin may be put into a Retort, and the Flowers will ascend into and fasten themselves about its Neck. *L.*

The Flowers, if tinged yellow, are to be mix'd with Tobacco-pipe Clay, and sublimed again.

Oleum Lateritium.

Oil of Bricks.

Let Bricks, heated red-hot, be plung'd into Olive Oil, till the whole Oil is imbibed; then the Bricks being sufficiently broke, are to be put into a Retort; and by a Sand-heat the Oil will ascend with a Spirit, which is to be separated from the Oil. *L.*

The Author of the *Pharmacopœia Reformata* tells us, that this Preparation has had a Place in most Dispensatories, under the pompous Names of *Oleum Philosophorum*, *Oleum Sanctum*, *Divinum*, *Benedictum*; but whatsoever Opinion some may have of this Preparation, it is a very indifferent, as well as disagreeable one, and is rarely used for medicinal Purposes; and it is probable, that, for these Reasons, the *Edinburgh Dispensatory* has rejected it.

it. The Liquor which comes over along with this Oil in Distillation, is very improperly called Spirit, being really no more than Phlegm, or Water tainted with the empyreumatical Taste of the Oil.

Oleum Picis Barbadenfis.

Oil of Barbadoes Tar.

Let Barbadoes Tar be distill'd in a Sand-heat, and an Oil will ascend with a Spirit. *L.*

See the Article *Pissæleon*, in the *Materia Medica*, among the Minerals.

Extracts and Refins.

Extractum Plantaginis.

Extract of Plantain.

Take any Quantity of Plantain-Juice; clarify it either by Yeast, the Filtre, or the White of Eggs; and afterwards evaporate it to the Consistence of Honey. *E.*

In the same Manner are prepared the Extracts of all acid, cold, succulent, and styptic Plants.

Extractum Absinthii.

Extract of Wormwood.

Take any Quantity of dried Wormwood, and a suitable Proportion of Spring-water; boil them together, pouring on fresh Water, till the Water has extracted all the Virtue of the Plants; then filtre the Decoction, and evaporate it over a slow Fire to the Consistence of Honey. *E.*

The Extracts of Gentian-root, black Hellebore-root, &c. of the Herb Centaury and Chamomile-flowers, are prepared in the same Manner; so likewise are the Extracts of all fixed Aromatics. *E.*

Extracts of the Roots of Elecampane, Gentian, black Hellebore; and

Extracts of the Leaves of Rue and Savine.

Boil them in Water; strain and press out the Decoction, and set it by till its Dregs are subsided; then boil it to the Consistence of a Pill, with Care, toward the End, to avoid Burning. *L.*

The Virtues of all these Extracts may be learn'd from those of the respective Vegetables whence they are drawn.

Extractum Glycyrrhizæ.

Extract of Liquorice.

Boil the Roots of Liquorice lightly in Water; strain and press out the Decoction: Then, after its Dregs have subsided, boil it away, till it will not stick to the Fingers, using due Care, toward the End, to avoid Burning. *L.*

See the Virtues of Liquorice in the *Materia Medica*.

Extractum Jalapii.

Extract of Jalap.

Pour upon Jalap-root powder'd, rectified Spirit of Wine; and, with a due Heat, draw a Tincture, and boil the Residue several times in Water: After Straining, draw off the Spirit from the first Tincture till it begins to thicken. Insipissate also the strain'd Decoctions; then mix the two Extracts, and with a gentle Fire reduce them to the Consistence of a Pill. *L.*

In the *Edinburgh Dispensatory* it is directed much in the same Manner, only Salt of Tartar is added to the Jalap-root, after the Tincture is extracted by the Spirit. This is contrived to get the saline as well as resinous Part of the Jalap; and it may possibly be almost of as much Use
E e e 2

in Practice as the simple Root, without any Preparation.

Extractum Corticis Peruviani, molle & durum.

Extract of Peruvian Bark, both soft and hard.

Take of Peruvian Bark, reduced to Powder, one Pound; of Water, ten or twelve Pints: Boil for an Hour or two, and pour off the Liquor, which will be red and transparent; but as soon as it grows cold, becomes yellow and turbid: Boil the Bark again in the same Quantity of fresh Water as before, repeating these Boilings till the Liquor remains transparent, when cold; then evaporate all these Decoctions strain'd and mix'd together, to the proper Consistence, over a very gentle Fire, with due Care to avoid Burning. This Extract is to be prepared under a double Form, one of the Consistence of a Pill, the other hard enough to be reduced to Powder. *L.*

The medicinal Virtues of this Extract may be learn'd from those of the Peruvian Bark. We are inform'd in the Narrative of the Committee, that it is design'd for those whose Stomachs are so tender, as not to be able to bear the Bark in Substance in the Quantity requisite. But these Stomachs do not often occur in Practice; and in all others, the Bark in Substance is a better Medicine.

Extractum Ligni Campechensis.

Extract of Logwood.

Take of Logwood in Powder, one Pound: Boil it four times, or oftener, in a Gallon of Water, to a Half; then boil all the Liquors, mixt together and strain'd, to a just Consistence. *L.*

This seems intended to fortify the Bowels, when weaken'd by a Diar-

rhæa or Dysentery; but should not be used till due Evacuations are made.

Extractum Ligni Guajaci, molle & durum.

Extract of Guaiacum-wood, soft and hard.

Take of the Shavings of Lignum Vitæ, one Pound: Boil it four times, or oftener, in a Gallon of Water, to half; then inspissate the Liquors, after they have been strained; but when the Water is near all dried away, add a small Portion of rectified Spirit, by which the Extract shall be brought to a uniform and tenacious Mals.

This Extract is also to be prepared under two Forms, one softer, and the other harder. *L.*

For the Virtues of this Extract, see the Article Guaiacum in the *Materia Medica*. I should apprehend, that a Decoction of Guaiacum will be much more likely to enter the Lac-teals, and impregnate the Blood with the Virtues of the Wood.

Boerhaave takes Notice of a Kind of Extracts, which he calls *Essential Extracts*, of which he gives an Example in the

Extractum Croci.

Extract of Saffron.

Nature has prepared, in particular Parts of certain Vegetables, a determined kind of Body, so different from all others as scarce to be referred to any other known Kind; and has at the same time endowed it with Virtues, otherwise inimitable. We have an Example of this in the Chives of Saffron, which the principal Chymists have esteem'd so much as to call it the *Philosopher's Spice*, and to denote it by the initial Letters *Aroph*, which stand for *Aroma Philosopherum*. It is incredible how rich this Saffron is in Colour, Taste, Odour, and Virtue; how small the Bulk.

Bulk is that possesses all these rich Faculties; and how tender and easily corruptible the Thing itself is; and therefore requires a peculiar Method of Operation.

Take, therefore, two Ounces of the choicest fresh *English Saffron* dried, and either cut small, or remaining whole; put it into a clean Bolt-head, with a long and slender Neck; pour upon it so much of the purest Alcohol as may float four or six Inches above it: Then stop the Glass slightly with a Wreath of Paper. Put it into a Furnace, so that it may be exposed to a Heat of only a hundred Degrees. Leave it thus in Digestion three Days, the Vessel being often shook: Let it afterwards rest for twenty-four Hours in a cold quiet Place; then carefully strain off all the tinged Liquor, thro' a Piece of clean Linnen, placed in a Funnel set in a clean Glass, and keep it closely stoppt. It will be of a bright-red Colour; the Saffron remaining at the Bottom of the Glass will be found paler than before. To this pour the like Quantity of fresh *Alcohol*, and proceed as before; and mix the Tincture thus acquired, with the former. Let these Tinctures be distill'd in a Glass Body, fitted with its Head, and perfectly well closed, with a Fire of a hundred Degrees, till about an Ounce remains behind; which, when cold, is to be pour'd into a Glass Vessel, to be kept carefully stoppt. It will prove of an exceeding red Colour, a highly fragrant Odour, and a bitter, aromatic, penetrating Taste, and have the Consistence of thin Oil. Let it be kept under the Title of the *Essential Extract of Saffron*. The Spirit that comes over in the Distillation will be limpid, and colourless; but retains the grateful

and aromatic Smell and Taste of Saffron. This is to be reserved for the same Use, and thus every time becomes the richer.

This surprising Experiment shews us a new Species of Matter, which we can neither call Oil, Spirit, Gum, Resin, resinous Gum, Wax, or Balsam; but it is something perfectly singular, and of a spirituous oily Nature. This Extract mixes with Water, Spirit, and Oil, and has such exhilarating Virtues, that, being used too freely, it occasions an almost perpetual and indecent Laughter; but, used moderately, it becomes properly exhilarating. It tinges the Urine red, and is particularly said to destroy the petrifying Power thereof in the Kidnies, and therefore to be an extraordinary Remedy against the Stone. It is the true *Arophi* of *Paracelsus*. There is no Occasion previously to digest the Saffron with Bread in the Heat of Horse-dung, in order to procure its Tincture, which is thus render'd rather worse than better; for in our present Preparation, all that is efficacious is brought together without Loss, or impairing its peculiar Virtues, or any sensible Change. And these Preparations being miscible with any Liquor, and of a very penetrating subtle Nature, easily enter the finest Vessels of the Body; and, by their extraordinary Mobility, diffuse their Virtue thro' the Whole, and chiefly excite the Animal Spirits. Lastly, they have that admirable Virtue, which the Author of Nature has planted in them, and which can never be explained upon any Principle, and can only be known in itself from its Effects.

The like Extracts may be obtain'd from Ambergrise, Musk, Civet, Balm of Gilead, liquid Amber, liquid Storax, Cloves, Mace, Nutmeg, Angelica, Galangal, Orrice, and other

Barks, and Flowers of a subtile Fragrance: Whence it is plain, that these Spirits of particular Bodies may be extracted and collected by *Alcohol*; and hence their sudden Action seems to proceed; because the most spirituous *Alcohol*, uniting with these active Spirits, makes a Medicine that immediately diffuses its Virtues every Way, and carries it thro' the Body; and when a similar Remedy is prepared from several such Ingredients mixed together, it easily appears, that thus an admirable Remedy may be compounded, rich in united Virtues, according to the Intention of the Artist; so that nothing of this Kind can be invented more effectual. These Extracts are best taken in *Canary*, or the like rich unctuous *Spanish Wine*.

Gummi & Refina Aloes.

The Gum and Refin of Aloes.

Take of *Succotrine Aloes*, four Ounces; of Water, a Quart: Boil the Aloes till it is dissolved as much as may be, and set all by for a Night: The Refin will be precipitated to the Bottom of the Vessel. The Liquor, pour'd off or strain'd, being evaporated, will leave the Gum. L.

We are told, that the Intention of the Separation of the Refin from the Gum; in this Preparation, is, to procure in the Gum a Medicine less purgative, and more agreeable to the Stomach. But I have never had any Reason, from Experience, to think that Aloes, on any Account, wants such Treatment.

Refina Jalappæ.

Refin of Jalap.

Take any Quantity of well-bruised Jalap-roots, and pour thereon as much rectified Spirit of Wine as will rise four Inches above it: Digest them together in *Balneo*

Mariæ, so as to extract the Tincture; which being filter'd, put it into a Glass Cucurbit, and distil off one Half by a Sand-heat: To the Remainder pour a sufficient Quantity of Spring-water, and the Refin will precipitate to the Bottom, which is afterwards to be dried with a very gentle Heat. E.

Thus likewise are prepared the Refins of Guaiacum, *Peruvian Bark*, and Scammony, &c. But the Refin of Guaiacum is more commodiously made from the Gum than the Wood.

The Refin of Jalap is not by much so good a Medicine as the Root, without any Preparation; of which those who have much used both in their Practice, must be abundantly sensible; tho' in comatose Disorders, and violent Affections of the Head, perhaps the Refin may be preferable, because it stimulates and gripes more than the Root.

Salts both essential and fixed, with the Preparations of Tartar.

Sal Essentiale Acetosæ.

Essential Salt of Sorrel.

Take any Quantity of the Juice of Sorrel, clarified by standing; evaporate two thirds of it away, strain the remainder thro' a Flannel Bag, and again exhale it to a Pellicle; then put it into a Glass Vessel, and pour a little Olive Oil upon the Top; set the Vessel in a Cellar, till numerous Crystals appear therein, which are to be first gently washed with Spring Water, and then dried. E.

The essential Salts of the Lesser Centaury, Succory, Eyebright, Fumatory, Plantain, Oak, &c. are obtained in the same Manner, as are also the Salts of all acid, austere, astrin-

astringent and bitter Plants, that contain but very little Oil.

Boerhaave remarks, that Salts may be procured in this Manner from the Juice of any other succulent Vegetable; but a different Salt will be always produced according to the different Nature of the Plant employed. If the Juices were either manifestly and purely acid, or acid with some Degree of Austerity, the Salt will resemble the Tartar of acid austere Wines. If a perfectly succulent Plant were chose, and neither acid or oily, as many medicinal ones are, the Salt will be of another particular Nature, perhaps resembling Nitre. Such a Salt is afforded by Brooklime, Endive, Fumitory, Dwarf-Elder, Grass, Knot-grass, Plantain, Self-heal, Succory, Water-creffes, Water-lillies, &c. Whence the Juices of these Plants are greatly medicinal, as abounding with this Kind of nitrous Salt, so as to open inveterate Obstructions, resolve the black bilious Juice, and cure chronical Diseases. But when the viscous Juices of Vegetables are used in this Process, as those of Purslain, Comfrey, or the like, their Salt cannot be obtained without a previous Fermentation, to dissolve their Tenacity. In like Manner, all the Juices abounding with Oil are unfit for this Purpose; for tho' they contain a Salt, yet it is so entangled with the tenacious Oil, as to prevent its uniting with the Particles of its own Nature, and forming Crystals; for Oil always prevents the Crystallization of Salts; and again, Plenty of Oil occasions a Loss of Salt, and *vice versa*, as well in Animals as Vegetables; on which Account those Salts are not easily obtained from such aromatic Plants as abound in Oil and Balsam.

Sal Absinthii.

Salt of Wormwood.

Let the Ashes of Wormwood be put

into an Iron Pot, and kept red-hot for some Hours by a strong Fire, often stirring them, that all Remains of Oil may be burnt out; then boil them in Water, strain the Water, which will be impregnated with the Salt, thro' Paper, and evaporate it to Dryness.

In this Manner is to be prepared the fixt alkaline Salt of any Plant, whose Ashes will yield that Kind of Salt.

When the Oil is sufficiently burnt out, may be judged of, as the Ashes are stirred up from time to time; for while the Oil remains in them, they will take Fire and sparkle, upon their being turned up to the Air. And this turning up the Ashes, which lie at the Bottom, to the Air, is necessary, that the Oil may be effectually consumed.

The Method of making fixed Salts directed in the *Edinburgh Dispensatory*, differs from this very little, except in the Circumstance of keeping the Ashes red-hot for some Hours, which is there omitted; and in the repeated Solutions, Filtrations, and Coagulations there directed, in order to render the Salt pure and white; but the whiter and purer the Salt is, it becomes in Proportion the worse for medicinal Uses, because it is then deprived of most or all of the Oil of the Vegetable, which I think of great Consequence. See Book I. Chap. vi. where the Medicinal Uses of these Salts are explain'd.

After the same Manner are obtain'd the fix'd Salts of Bean Stalks, Broom, and many other Vegetables.

The Spirit, Oil, and fix'd Salt of Tartar.

Fill two thirds of a Glass Retort, with choice Pieces of the best white Tartar, and place it in a Sand Furnace; apply a large Glass Receiver, or one that is of the great-

est Size, and lute the Juncture with a common Mixture of Linseed Meal. Apply a gentle Fire for some considerable Time, scarce exceeding a hundred Degrees; there will come over a small Quantity of a limpid, thin, tartish, somewhat spirituous, bitterish, and lightly odorous Liquor, which is so penetrating, as easily to sweat thro' the Luting. Let this be kept separate; then the Fire being raised to the Heat of boiling Water, a white Vapour comes over, and along with it a highly penetrating Spirit, which is wonderfully flatulent, and will pass thro' almost any Luting; and, if we endeavour to confine it by that called the *Lutum Sapientiae*, it bursts the Glass by its Elasticity; and it usually breaks out with Force, or perspires at Intervals, thro' the Luting; and, along with this flatulent Spirit, there comes over a thin, and extremely subtil Oil, of a yellow Colour, a somewhat aromatic Taste, bitter, heating, and of no ungrateful Odour.

Paracelsus and *Helmont* highly recommend this Oil in Diseases of the Ligaments, Membranes, and Tendons, which they, upon Experience, have declared may be cured by it, even tho' contracted.

The former Substances being collected separate, let the Remainder be urged gradually, to the utmost Degree of Heat that Sand will give; and thus again a Spirit will come over, and an Oil, as before; but at the same Time a gross, black, fetid, ponderous, glutinous, and bitter Oil, leaving the remaining Tartar black, sharp, and in every Respect truly alkaline. If this Mass be urged with the strongest Fire of Suppression, it will still yield a very thick, black, and pitchy Oil, along with a certain Smoke. And these will continue to

rise, how violent soever the Fire be made, and how long soever the Operation is continued; and there will still remain an extremely black, sharp, alkaline, and dry Mass at the Bottom; which being exposed to the open Air, by breaking the Glass, grows hot upon Contact therewith, and readily dissolves into a Liquor: Nor can it be kept dry, without great Caution; whereas the Tartar, from whence it was produced, would scarce dissolve in Water.

When this black dry Mass is exposed to a naked Fire in the open Air, it takes Flame; and after Burning, leaves a copious white alkaline Salt behind, as strong, fiery, and pure, as can any way be prepared. It affords but little Earth, and readily dissolves of itself; if long detained in a strong Fire, it grows blue, of a Marble Colour, and sometimes brown; and thus always becomes stronger.

The first distilled and highly penetrating Oil of Tartar is recommended for discussing cold Tumours, and for restoring Motion to the dried tendinous Parts in contracted Limbs, together with the Assistance of proper Baths, Fomentations, and Frictions. If these Oils be rectified, and render'd more subtil and penetrating, they are recommended by Chymists, even for resolving gouty Knots and Concretions. It is said by many, that rich Perfumes may be exalted by this Oil. Salt of Tartar may be thus prepared in a greater Proportion to the Tartar employed, than by any other known Method, and in greater Plenty the slower the Distillation was performed. This, also, is the best, sharpest, most penetrating, and pure of all the fixed Alkalies; nor is there any other known Body in Nature, that affords more of such a saline alkaline Matter, than Tartar. And if the black alkaline Matter, remaining after the most violent Distillation,

lation, be set by in the Retort, slightly covered with Paper, it wholly resolves into a Liquor, which, being filter'd, affords an admirable Oil of Tartar *per Deliquium*, extremely fit for numerous Chymical Uses, and particular Operations. If the same Salt be first strongly calcined in an open Fire, it thus also resolves in the Air, and affords an Oil of Tartar *per Deliquium*, but of a more sharp and alkaline Nature than the former.

In the *Edinburgh Dispensatory*, Salt of Tartar is thus order'd to be made:

Sal Tartari.

Salt of Tartar.

Take any Quantity of white Tartar, wrap it up in moisten'd Cap-paper, and calcine it in a reverberating Furnace, till it becomes very white; then dissolve it in hot Water, filtre the Solution, and exhale it in a clean Glass Vessel, till it becomes as white as Snow, and perfectly dry, keeping it continually stirring with an Iron Ladle towards the End of the Operation, to prevent its sticking to the Bottom of the Vessel. If the Salt of Tartar be required stronger, let the white Salt be fused with a very violent Fire, in a Crucible, and reverberated for some Hours, till it turns of a greenish or blue Colour.

E.

In the *London Dispensatory* it is directed in much the same Manner. See the Article of *Alkali*. Chap. vi. Book I.

Liquamen Salis Tartari, vulgo Oleum per Deliquium dictum.

Liquor of Tartar, commonly called Oil of Tartar *per Deliquium*.

Take any Quantity of Salt of Tartar, put it into a flat glass Vessel, and expose it to the Air of a moist Place for some Days, so as that it may dissolve into a Liquor, which

is either to be filter'd, or freed from from its Faces, by inclining the Vessel. The higher this Salt is calcined, the easier it resolves. *E.*

In the *London Dispensatory* it is thus directed under the Title of

Lixivium Tartari.

Ley of Tartar.

When the Tartar is calcined white, let it be put in a damp Place, that it may liquefy by the Moisture of the Air. *L.*

In this Process the Liquor is rather more pure, than if the calcined Tartar were dissolved directly in Water.

Nitrum fixatum.

Fix'd Nitre.

Fill a strong and large Crucible with very dry powder'd Nitre, laid lightly in; set the Crucible firm in the Furnace, and surround it with burning Coals at a Distance; then gradually bring them nearer, that the Crucible, with the Nitre it contains, may be thus heated equally, to prevent Bursting. When all is now thoroughly hot, apply as strong a Fire as is necessary to make the Nitre run like Water; then take a little Piece of Wood-coal, thoroughly ignited, and put it gently into the melted Nitre, now at rest. The Coal (not the Nitre) will thus instantly take Flame with a hissing Noise, and move over the whole Surface of the melted Nitre with a brisk Motion, till it is consumed, and the Flame extinguished, so as to leave the Nitre melted, as before it was thrown in. Now throw in another Bit of live Coal as before, and the same Phenomena ensue. Continue repeating the Operation, till at length the Nitre remains fixed with the same Degree of Fire, so as to flow no longer, nor give

give Flame to the Coal thrown in; which at length will always prove the Case. This State may be known to approach, when the Nitre begins to lose its Fluidity, and the Coal leaps briskly about, and sometimes flies out of the Crucible: At this Time, therefore, the Fire should be a little increased. And when the Coal ceases to flame any longer, let all cool, and there will remain in the Crucible a Mass, with an hollow Part on its Top, where the last burning Coal had rested: This Mass is solid, ponderous, of a Colour betwixt white and green, fiery, alkaline, and presently runs in the Air; therefore, whilst yet very hot, let it be presently taken out by breaking the Crucible, and put into a clean Glass, to be carefully stopped.

The Alkali, thus produced, is very difficult to keep dry; but presently relents in the Air, and runs into a strong fiery alkaline Liquor, leaving a large Quantity of Ashes behind.

Tartarus Regeneratus.

Regenerated Tartar.

To a Quantity of sharp, pure, and dried fixed Alkali, contained in a large Glass with a narrow Neck, pour strong distilled Vinegar, till it almost covers the Salt; scarce any sensible Effervescence will appear: Shake them strongly together and then some small, but not lasting Ebullition appears. Pour on more distilled Vinegar, and then a greater Ebullition will arise, and appear sufficiently manifest: After shaking the Glass, add a third Quantity, and then a violent Ebullition, Frothing, and Hissing will be found; and prove the stronger, the more the Glass is shook; and this continues a long while; so that the Vinegar poured

on, makes the stronger Effervescence, the nearer the Operation approaches to the Point of Saturation with the Alkali; which Point is generally obtained, when about fourteen Times the Weight of strong distilled Vinegar is added to the Alkali. Now towards the End, let the Mixture be well heated, and long and strongly stirred, that no more Acid may be poured on, than is exactly required to obtain the Point of Saturation; which will at length be hit, by continuing to add a little of the distilled Vinegar by Degrees, and well agitating the Mixture, till the Addition, and Shaking in of a little more, no longer causes an Effervescence, even in the Heat. Then let the Mixture stand warm for twenty-four Hours; and, if upon shaking, it makes no Ebullition, again drop in a little Vinegar, and shake the Vessel; and if now no Effervescence arises, then the exact Point of Saturation is hit. During the Operation, the violent Effervescence throws off a very elastic Vapour, which bursts out of the Glass with a hissing Noise, after having been confined, by pressing the Hand against the Mouth of the Glass, whilst it was shook, and then suddenly taking it away: And if the Orifice should be closely and strongly shut up during the Effervescence, the Glass would be burst to pieces. The Liquor, thus prepared, is transparent, of a particular Odour, and not acid, and of a Taste neither acid nor alkaline, but particularly saline, and almost without Acrimony. It has a mild and innocent Virtue, tho' powerfully attenuating and resolving; being purgative, diuretic, and sudorific; whence it proves an admirable Remedy in chronical Diseases, attended with a tenacious

ous Matter, being given in a proper Dose at proper Seasons.

The Liquor being decanted clear from its Fæces, and distilled in a Glas Alembic, affords a pure simple Water; whilst the Liquor remaining behind, becomes of a brown or blackish Colour; and, at length, perfectly black, fat, thick, of an extremely penetrating Taste, which discovers it to be of a saponaceous, penetrating, and resolving Virtue. Take a little of this Liquor, and mix it with a little Vinegar; if it makes an Effervescence, this shews, that the Alkali still predominates; and, therefore, the whole must be again saturated, by the careful Addition of distilled Vinegar; and as this usually happens to be the Case, the Point of Saturation is to be carefully and anxiously secured.

When at length this is happily obtained, let the Liquor be separated by Rest from its Fæces, and then all the Water be drawn off by a gentle Fire, till a saline Mass remains at the Bottom, of a black, reddish Colour, and a highly penetrating, but very particular saponaceous Taste. This Mass will have attracted, and retained all the Acid of the Vinegar, and given out all the Water. Mr. *Homburg* has laboriously shewn, that the Weight of the fixed Alkali is here increased nine Twentieths, in respect of the Alkali, by the Acid of the Vinegar so attracted; and that this Acid, with respect to the Vinegar, was in the Vinegar about a thirty-seventh Part of the whole, the other thirty-six Parts being pure Water. And thus the Salt is procured, which the Chymists call *Regenerated Tartar*.

If the Salt, thus laboriously prepared, be urged with a strong Fire, it becomes volatile, and flies off in the Air. When carefully dried with a very gentle Fire, it appears like a

Mass that had strangely concreted in the Cold, by the Apposition of little thin Plates like Talc. It presently runs with Heat, into a Kind of thick Oil, but again appears leafy in the Cold; and hence it has been called *Terra foliata*: And *Tachenius* pretending it to be dissolved Talc, is taken to task for it by *Zwölfer*, in his apologetic Discourse against *Tachenius*.

There is not, in all Chymistry, a more instructing Operation than this; it shews us a new, unexpected, and particular Appearance of Alkali and Acid, in the making of an Effervescence. We here see all the Degrees of Colour, from the transparent Whiteness of Water, up to Blackness; we see that a fat inflammable Oil is regenerated from Alkali, calcined by a violent Fire, and a thin, hungry Spirit of Vinegar; for this dry Salt takes Flame in the Fire, and, when distilled with a strong Heat, affords a true Oil. Hence we learn, that Salts produced by a Mixture of Acid and Alkali, are not barely made up of the Acid and Alkali, as they are again separable, but that a new Thing is produced, of which no Sign appeared before. We are taught what Proportion of Acid, and what Proportion of Water, is contained in an acid Liquor; what Proportion of Acid is required exactly to saturate an Alkali; and the true Manner of converting fiery, fixed Alkali, into a mild compound, volatile, saponaceous, oily Salt. This Salt, when properly prepared, is a most admirable Menstruum, converting its Subject, by Mixture and Digestion, into an uniform soluble Mass, that will readily pass thro' the Body, and remain rich in its own Virtues: It is the greatest Resolvent in the Body hitherto known, and therefore highly valuable, as it is not hurtful in hot Cases, yet serviceable in cold ones, and almost suited to every

Patient. *Boerhaave* thinks this, *Hellmont's* volatile Salt of Tartar, which he so highly recommends, and substitutes for the *Alcabest* itself. It seems certainly to be the *Acetum radicum* of the ancient Chymists, as, in its Preparation, Vinegar returns, and is joined with its own Matrix of calcined Tartar; but whoever shall over carefully endeavour to dissolve, purify, filtre, inspissate, or calcine this Salt, in order to make it white, he will find it fly off into the Air, and be lost; and may thus, indeed, be convinced of its Volatility, with the Loss of his Labour and Cost. And this Admonition *Boerhaave* tells us he gives, because *Senertus* recommends a scrupulous Diligence in purifying this Salt; which is not only a lost, but an impoverishing Labour.

I have given this Preparation from *Boerhaave*, as he seems to have been the most exact and particular; and must remark, that the Medicine is not at all the better for its Whiteness; nor the worse for its wanting the foliated Appearance.

In the *Edinburgh* Dispensatory it is thus directed:

Take any Quantity of dry pulveriz'd Tartar, put it into a large Glass Vessel, and pour on gradually as much Spirit of Vinegar as will saturate it; evaporate the filtrated Liquor over a very gentle Fire, till it becomes dry, but take Care it does not attract an Empyreuma; pour again upon the remaining Salt as much Spirit of Vinegar as will saturate it, then carefully evaporate the depurated Liquor to a Salt. *E.*

In the *London* Dispensatory it is thus order'd under the Title of

Sal Diureticus.

Diuretic Salt.

Take of any alkaline fixt Salt, one Pound; and boil it in four or five Pints of distilled Vinegar, with a

very gentle Heat; when the Fermentation ceases, add more distilled Vinegar, and when the Fermentation arising from the Addition is over, pour on another Quantity of the like Vinegar, and proceed thus till the Vinegar, being near all evaporated, fresh Vinegar will not excite any Fermentation, which will generally happen by the Time about ten Quarts of Vinegar shall have been used; then gently evaporate to Dryness. The Salt left will be impure, which is to be melted for a time, but not too long, with a gentle Heat, afterwards dissolved in Water, and transcolated thro' Paper. If the Melting has been rightly performed, the strained Liquor will be limpid and colourless, like Water, but otherwise brownish. Lastly, the Water is to be evaporated with a very gentle Heat in a shallow Vessel, the Salt, as it dries, being frequently stirred, that the Humidity may the sooner be discharged. This Salt must be kept in a close Vessel, that it may not run by the Moisture of the Air.

The Salt ought to be very white, and should dissolve wholly, either in Water, or Spirit of Wine, without leaving any Fæces; if the Salt, tho' ever so white, leave in the Spirit any Fæces, after it is dissolved in this Spirit, it is to be filtr'd thro' Paper, and dried again. *L.*

We are told, that the Success of this Operation depends upon three Circumstances; completing the Saturation, duly calcining afterwards, and drying it at last, without too much Heat. For the First, it is necessary to make the finishing Trial when the Liquor is almost evaporated away. The Degree of Calcination may be judged of, by dropping a little into Water, and observing, when it begins to part with its Blackness very readily;

readily; and this Point must be carefully watched; for the Solution of the Salt will be coloured, if the Salt is too much calcined, as well as when too little. In the last Drying, Care should be taken not to melt it; for then it will lose, in some Degree, its Whiteness; and will, upon Solution, again deposit Dregs; tho' if it is not melted, it will not have that foliated Appearance, from which this Salt has obtained a Name, *viz. Terra foliata Tartari*, the foliated Earth of Tartar. But when it is prepared, so as to dissolve intirely, it is more agreeable to the Stomach, and a greater Dose can be given of it, than when it does not dissolve so completely.

In all these Preparations of regenerated Tartar, the Evaporation of the Moisture, and Formation of a Salt, should seem absolutely superfluous; because the Vinegar saturated with the alkaline Salt, must be in all respects as good, and in many a better Medicine, than the Salt, when made with all this Trouble.

Tartarus Vitriolatus.

Vitriolated Tartar.

Take three Ounces of pure Oil of Vitriol; dilute it with thrice the Quantity of warm Water in a tall capacious glass Body, with a narrow Neck: Add to it, Drop by Drop, a Quantity of Oil of Tartar *per Deliquium*, till the Point of Saturation is perfectly obtain'd; otherwise a pernicious Acrimony, either acid or alkaline, remains. In this Operation a violent Effervescence will arise, and a white Salt begin to appear at the Bottom, long before the Saturation is completed. After this Point is found, shake the Vessel for a considerable time, and taste the Liquor; if it tastes neither acid nor alkaline, take a little thereof, and heat it: Divide it into two Parts,

and to one add a Drop of Oil of Vitriol, and to the other a Drop of Oil of Tartar *per Deliquium*; and, if no Effervescence appears in either, the Point of Saturation, here so requisite for medicinal Use, is exactly hit. If any Effervescence arise, upon the Addition of the Acid, the Alkali prevails; and, if the Alkali causes any Effervescence, the Acid prevails; but when the Equilibrium is obtain'd, let the Liquor be intirely dissolved by the Addition of hot Water, so that all the Salt may be taken up. Let the Liquor be strain'd while it is hot, evaporated to a Pellycle, and crytallized. A white Salt will be obtained, of a neutral Taste, that requires a large Proportion of Water to dissolve it: What remains cannot be crytallized, as happens in the Case of Nitre, Sea-salt, and almost every other Salt.

The Virtue of this Salt is esteem'd highly opening, if taken upon an empty Stomach, diluted with Broth or Whey, and assisted with the Exercise of the Body; for thus, by attenuating, resisting Putrefaction, and stimulating, it opens the obstructed Viscera, so as to have acquired the Name of the *Universal Digestive*.

Some eminent Chymists, among whom we reckon *Tachenius*, imagine that the Oil of Vitriol, after having suffer'd so great a Fire, carries up with it some volatilized metallic Part, that gives a noxious Quality to this Salt, not to be easily destroyed: Hence they endeavoured to obtain this Acid, native and simple, without Fire, and join it with fix'd Alkali of Tartar. They, therefore, dissolved Vitriol in Water, so as to make a dilute and pure Liquor; to which, when filter'd, they added Oil of Tartar *per Deliquium*, Drop by Drop; upon which the Liquor grows turbid,

turbid, and the Iron, in Form of yellow Oaker, falls to the Bottom: They carefully proceed thus, till no more Precipitate is obtained upon Addition of the Alkali. This Point they carefully observe, and set by the Mixture, till all the Metallic Fæces are precipitated; then filter the pure Liquor, inspissate, and crystallize as before. Thus a *Tartarum Vitriolatum* is obtained without Fire; and, as they seem to imagine, without any Suspicion of a sharp corrosive Virtue. And if there be no blue or green Colour remaining in the Liquor, or the Salt prepared from it, the Preparation will be good; but, otherwise, it will retain something of Copper, and prove malignant.

When by the like Means, a Salt is prepared with any pure volatile Alkali and Oil of Vitriol, either alone, or diluted with Water, a like, but a semi-volatile and more penetrating Salt is obtained; whereas the former is wonderfully fixed. This Salt, in whatever Manner prepared, appears considerably ponderous and solid; and yet, at the same time, is mild and opening.

Practitioners seem to be deceived in nothing so much as in the vitriolated Tartar, because Medicines of very different, and even directly opposite Virtues, are called by this Name. That usually sold in the Shops by this Name, is so strong an Acid, as even to excoriate the Lips and Tongue of those who take it; and I believe Chymists seldom take the Trouble of making it, but substitute for it the *Residuum* of the *Spiritus Nitri fortis Glauberi*; a very different Thing from the true vitriolated Tartar here intended, which is a perfectly neutral Salt, somewhat bitterish, and nothing less than Acid. If this is made exactly according to these Directions, it is a most excellent Medicine in many Distempers, where nothing will answer so well.

Taken in the Quantity of a Dram, or more, it excellently purges the Stomach and Intestines, and resolves the viscid and tenacious Concretions contain'd therein, which are the Parents of many Disorders. If taken in smaller Quantities, ten or fifteen Grains, for Example, and repeated frequently at due Intervals, it is excellent in *Rheumatisms*, inflammatory Distempers, Fevers, and all Disorders attended with a Sickness of the Blood. And in acute Distempers, it will raise a Sweat better than Alexipharms, without exciting any Heat. It is also an admirable Diuretic. I have been the more particular with respect to this Medicine, because I find its Virtues are very little known or regarded; and because I have very seldom been able to persuade Apothecaries, that this vitriolated Tartar differs in Efficacy from the common Sort, so far as to use it in my Prescriptions, having generally found the latter used instead of this.

In the *London Dispensatory* it is thus directed, under the Title of

Tartarum Vitriolatum.

Vitriolated Tartar.

Take of green Vitriol, the Weight of eight Ounces; of Water, two Quarts. The Vitriol being dissolved in the Water boiling, throw in Salt of Tartar, or any other fix'd Alkali, till all Fermentation ceases, which usually happens after throwing in four Ounces, or something more, of the alkaline Salt; then strain thro' Paper, and evaporate duly, that the Salt may crystallize. *L.*

The Liquor should be kept boiling a little while, every time the alkaline Salt is thrown in, that it may duly penetrate, and draw forth the acid Spirit from the Vitriol.

The Point of Saturation is most exactly to be judged of, by dropping the

the strong Spirit or Oil of Vitriol into a Spoonful of the Liquor filter'd; for as long as no Beginnings of Effervescence hereby appear, the alkaline Salt does not exceed. This Salt may otherwise be prepared with a fixed Alkali, and the strong Spirit or Oil of Vitriol; but the preceding Method best secures against a Redundancy of Acidity in the Salt.

I have never known this Sort used; so can say nothing of it from Experience.

Tartarus Tartarizatus. Tartarified Tartar, otherwise call'd

Tartarus Solubilis.

Soluble Tartar.

Reduce the purest white Tartar to fine Powder, and boil a sufficient Quantity thereof, with ten times its Weight of Water, in a large Copper Vessel, till the Tartar appears sufficiently dissolved: Let the Vessel remain over the Fire, that the Water and the Tartar may continue constantly boiling. The Liquor, being now tasted, proves acid, and is almost transparent, and tolerably pure. Then let fall from an Height a Quantity of Oil of Tartar, Drop by Drop, into the boiling Liquor, which is still to be kept boiling, whilst the Oil of Tartar is dropt in. Upon the Falling of each Drop, there arises a great Ebullition in the Liquor, proceeding from the Meeting of the Acid and the Alkali; as appears from hence, that the Ebullition, soon after, spontaneously ceases, and is raised again by dropping in more of the alkaline Liquor; and, because this is performed in a strong boiling Heat, large spherical Bubbles are generated on the Surface of the boiling Liquor, that presently crack, burst, and appear again. The Operation is thus to be patiently continued, till at length no more Effervescence

arises upon dropping the alkaline Liquor into the boiling Lixivium. And now the Acidity of the Tartar will be so saturated with such a Quantity of its own Alkali, as neither to appear acid nor alkaline, but a third new Salt. But this Point of Saturation must be exactly hit, otherwise the Salt will be acid, if too little Alkali were added; or Alkaline, if too much: Great Caution must, therefore, be used at the End. This Liquor is to be strain'd hot and quick thro' Flannel, till it becomes clear. It will be of a blackish-brown Colour, of a particular bitterish, saline, unctuous Taste, but scentless. If inspissated by Heat till a Skin appears on its Surface, and then set for some time in a cold Place, it deposits to the Bottom and Sides of the Vessel certain saline Grains, which, when collected, are a Tartar easily soluble in Water, even in the Cold; whereas before, it could scarce be dissolved therein without a boiling Heat: Whence this Preparation may properly be called *soluble Tartar*.

Tartar has a manifest Acidity; by the prevailing Force thereof it acts kindly upon the first Passages, and this Acidity is the Cause that it makes so strong an Effervescence with its own fixed Alkali, which is so easily produced from it: For after this Acidity is overcome by the Alkali, the Tartar becomes easily soluble, and a new kind of Salt is form'd, which has a considerable Virtue in the Body, when taken upon an empty Stomach, dissolved in Water: For thus it deterges, and gently purges, and helps to cure many inveterate Diseases. Externally used, it cleanses foul Ulcers, and disposes them to heal: A Solution of this Salt in Water is one of the best Menstruums hitherto known in Chymistry, as any one

one may learn by boiling Gum-Lac, Myrrh, and the like, therein: Whence he will find it can scarce sufficiently be commended; and hence it is plain, that, used as a Medicine, it will dissolve viscous Concretions in the first Passages; and it is even supposed to dissolve the tartarous Matter of the human Stone, generated in the Receptacles and Passages of the Bile and Urine, provided it be used plentifully every Day, the Dose being gradually increased. It is useful in the Stone, Jaundice, and hypochondriacal Disorders. Lastly, the Examination of this Process shews how proper Cream of Tartar is in all those Distempers, where the Bile in particular, and other Humours, putrify in the Intestines, from a burning Fever, or other Causes, and thus becomes alkaline; for this Disposition is then corrected by the latent Acidity of the Tartar; and at the same time converted, in the Body, into a mild aperitive and soluble Salt, which opens the Passages, without greatly stimulating them, and clears away Obstructions.

In the *Edinburgh Dispensatory* this is directed under the Name of soluble Tartar, with this only Difference, that the Crystals of Tartar are used instead of the Tartar; but this makes no material Difference. This Medicine should seem to resemble *Seignette's Salt* in Virtues.

In the *London Dispensatory* the *Tartarum Solubile* is thus directed:

Take of alkaline fix'd Salt, a Pound; of Water, one Gallon: The Salt being dissolved in the Water boiling, throw in Crystals of Tartar in Powder as long as any Fermentation is raised, which usually ceases before thrice the Weight of the Alkali is thrown in. Then strain the Liquor thro' Paper, and, after due Evaporation, set it by for the Salt to crystallize; or else

evaporate the Liquor wholly away, that the Salt may be left dry. L.

CrySTALLI Tartari.

Crystals of Tartar.

Take any Quantity of white Tartar, reduced to Powder; dissolve it in twenty times its own Weight of Spring-water, and filtre the Solution, whilst it is yet hot, through Cap-paper, into a wooden Vessel: Then expose it to the cold Air for a Night longer, that the Crystals may shoot to the Sides of the Vessel; after which pouring off the Water, let the Crystals be taken out and dried. There is no Difference between this and that of the *Edinburgh*.

Cremor Tartari.

Cream of Tartar.

Take any Quantity of the foregoing filtered Solution of Tartar, and boil it over the Fire, till a thick Skin appear on the Surface, which is to be taken off with a perforated wooden Ladle; then boil it till a new Skin arises, and take this off as the former; and continue to do this till all the Water is wasted in this Manner, and at length dry what was so skim'd off in the Sun. E.

Both these are very pretty cooling Purges; or may with very good Effect, be given in small Doses as Alteratives. Their great Uses are, in Cases where there is a Tendency to an alealine Putrefaction in the *Primæ Viæ*; or whole Habit. See the Remarks on the *Tartarus Tartarizatus*. *Cremor Tartari* is esteem'd a Specific in the dry Gripes excited by the Fumes of Lead; a Distemper called the *Bellon*, by the Smelters of Lead. It is to be taken frequently in this Case.

Sapo Tartareus.

Soap of Tartar.

Take any Quantity of Salt of Tartar thoroughly calcined, and whilst it yet remains hot, reduce it to Powder; put it into a wide glass Vessel, and immediately pour thereon twice its Weight of Oil of Turpentine, and let them stand together in a Cellar for some Weeks, till the Oil shall have entered the Salt; then by degrees add more Oil, till at length the Salt shall have imbibed thrice its own Quantity thereof, and they both together incorporate into a Soap, which they will do in the Space of a Month or two, provided the Matter be kept daily stirring.

The Operation will be finished the sooner, if the containing Vessel be fasten'd to the Sails of a Wind-mill, or any other Machine that has a swift circular Motion. *E.*

Sapo Amygdalinus.

Almond Soap.

Take any Quantity of fresh Oil of Almonds, and thrice its Measure of the Soap-leys; Digest them together for some time in such a Heat, wherewith the Mixture shall but just boil, and within a few Hours the Oil and Leys will be united; after which the Liquor in Boiling, will soon become ropy, and in a good degree transparent, and will cool into the Consistence of a Jelly: Then throw in Sea-salt, till the boiling Liquor has lost its Ropiness: Continue the Boiling till Drops of the Liquor being received upon a Tile, the Water is seen to separate freely from the coagulated Soap; then remove the Fire, and the Soap will gradually rise to the Top of the Liquor, which is to be taken out before it is cold, and put into a wooden

Frame, which has a Cloth for its Bottom. In the last Place, being taken out, it is to be set by till it acquires its just Consistence.

After the same Manner may Soap be made with Olive Oil, in which the finest Oil ought to be employ'd, that the Soap may be as little ungrateful as possible, either to the Palate or Stomach. *L.*

See the Virtues of Soap in the *Materia Medica.*

Cauterium Potentiale.

The Potential Caution.

Take one Part of Quicklime fresh prepared from Stone; and put it, whilst it remains perfectly dry, solid, and uncrack'd, into a clean iron Pot: Lay upon it two Parts of pure Pot-ash, so as every Way to cover the Lime: Cover the Pot with a Linnen Cloth, and leave it in this State till the Lime begins to split; then add four times their Weight of fair Water, and boil them together for an Hour or two. Strain the clear Lixivium through a close Linnen Bag, made of a conical Form, till it becomes as limpid as Water; then inspissate this Lixivium in a large iron Ladle, with Care to prevent Boiling over, till it becomes perfectly dry; making the Fire so strong, at last, as to ignite the Ladle and melt the Matter, after it ceases to fume. As soon as it runs, pour it out upon an hot Copper Plate; and, whilst it is yet soft, make it flat, and cut it into little Sticks fit for Surgeons Use: Put the Pieces immediately into a strong, heated, and dry Glass, which must be directly stop'd with a sound and dry Cork, and then be carefully closed over, by having its upper End dipp'd in melted Pitch, to prevent any Moisture from insinuating; which with in-

F f f

credible

credible Force, is attracted by the Alkali so prepared, even through Cork and Bladder; but by this Contrivance it may be kept perfect for Years. When any Part is taken out for Use, this should be done in a strong Heat, near the Fire, and in a dry Air, the Glass being again immediately closed as before.

The Salt acquires a very strong and quick corrosive Power on this Account, that the fiery fixed Alkali attracts the fiery Virtue of the Lime; for no such Power resides either in the Alkali or Lime alone. This Corrosiveness exceeds that of any other known Salt; for if a little Piece of it be applied to the Skin, contained in a small round Hole cut in a Plaster, first laid upon the Part, and then cover'd with another Plaster, it soon burns the Skin and the Fat; for which Reason Surgeons prefer it as their chiefest potential Caution. While the fresh Lixivium is boiling over the Fire, it will immediately dissolve almost any Animal Substance thrown into it; as also many vegetable Bodies, and fossil Sulphurs. But a prudent Application of such a Lixivium is an incomparable Remedy for disposing deep gangrenated, and almost sphacelated Parts of the Body to Separation; tho' its Application requires the Caution of an experienced Surgeon. If the Lime were first slaked either in the Air or in Water, as almost all old Lime is, or be already reduced to fine Powder, it will not give this corrosive Salt with fixed Alkali.

This Salt acquires this particular Property, that it becomes extremely well disposed to unite with Oils, whether express'd or distill'd, Vegetable or Animal, and thus forms Soaps; being by the Preparation render'd so penetrating, as intimately to divide the Body of Oil, and unite therewith, which unassisted with the

Sharpness of the Lime, it could not well do; nor will fixed Alkali easily melt at the Fire without this Assistance.

These are Boerhaave's Directions for preparing Soap Leys, and the Potential Caution. Those in the London Dispensatory are thus:

Lixivium Saponarium.

Soap Leys.

Take equal Weights of *Russia* Potash and Quicklime, and throw Water upon them by degrees, till the Lime is slaked; then throw on more Water, and stir all together, that the Salt of the Ashes may be dissolved: After some time pour the Liquor, filter'd thro' Paper if needful into another Vessel. A true standard Wine Pint of this Liquor, measured with the greatest Exactness, ought to weigh just sixteen Ounces: If it is heavier, for every Dram it exceeds that Weight, an Ounce and a half of Water, in Measure, is to be added to each Pint of the Liquor; but if it is lighter, it must be boiled till the like Quantity of Water is carried off, or else must be thrown upon fresh Lime and Ashes. *L.*

Our Makers of soft Soap prepare their Ley stronger than this: Their Ley will be reduced to the Standard here propos'd, by mixing it with something less than an equal Measure of Water.

Causicum commune fortius.

The stronger common Caustic.

Boil to a fourth Part any Quantity of the Soap Leys above describ'd; then sprinkle in, while boiling, Lime that has been kept in a Vessel pretty close stop'd for several Months. Continue to add this Lime, till all the Liquor is absorb'd, and the Whole reduced to

a Pafte, which is to be kept in a Veffel well flopt. *L.*

The Design of thus keeping the Lime before it is used is, that its Acrimony may be a little abated. This Caustic is preferable to that called the *Lapis Infernalis*, as it will not liquify like that, by the Moisture of the Part, on which it is applied, and by this means keeps better confined within the Limits in which it is intended to operate; for this Reason the *Lapis Infernalis* is little used at present by our Surgeons.

Causticum commune vitiis.

The common milder Caustic.

Take of soft Soap, and of fresh Quicklime, equal Parts, and mix them at the Time of using. *L.*

Here in the Soap the Acrimony of the Ley being, by the Mixture of Oil and Tallow, as it were, wholly retunded, the Lime should be quite fresh, without any Abatement of its Corrosivenes; for thus the Caustic is a great deal milder than the former.

CHAP. II.

CHYMICAL PREPARATIONS of ANIMALS.

Spiritus, Sal, & Oleum Cornu Cervi.

Spirit, Salt, and Oil of Hartshorn.

TAKE any Quantity of Hartshorn, broke into small Pieces, and put it into an earthen or coated glass Retort, so as to fill the same up to the Neck: Fit a large Receiver thereto, and distil with due Degrees of Heat in an open Fire. The *Phlegm* will first ascend, then the *Spirit*, next the yellow *oily Salt*, and at last the dusky red Oil, together with the *volatile Salt*, a black *Earth* remaining at the Bottom, which being calcined in an open Fire till it becomes white, is called by the Name of calcined Hartshorn. *E.*

The several Preparations, being poured out of the Receiver, are thus separated:

The Oil is separated from the Phlegm and Spirit by Filtration, the

two latter passing thro', and leaving the Oil behind in the Paper.

The Phlegm is separated from the Spirit by gentle Distillation in a tall Vessel, the Spirit ascending first, and leaving the Phlegm behind.

The Spirit may be resolved into Salt and Phlegm, by distilling it in a very tall and narrow Cucurbit; for thus the dry Salt will fix itself to the Head, and leave the Phlegm at the Bottom.

The Salt is freed from the Oil by subliming it with six times its own Quantity of Chalk, or calcin'd Bones; for by this means the Oil is kept down whilst the Salt sublimes. *E.*

In the *London Dispensatory* we are told, that if the Oil be separated, and the Spirit and Salt mixed together, be distilled again, with a very gentle Heat, they will both rise more pure. If this is carefully repeated several times, the Salt will become

very white, and the Spirit as limpid as Water, with a grateful Smell.

If the Salt be separated from the Spirit and sublimed, first from an equal Weight of fine Chalk, and then again from a small Quantity of rectify'd Spirit of Wine, it will become sooner pure. Calcin'd Hartshorn is for the most part made by burning the Horns after they have pass'd thro' the preceding Operation. *L.*

A Spirit, Salt, and Water, may in the like Manner be distilled from all the solid Parts of Animals; as also from their Blood, provided it be first dried by a gentle Heat. The same may be done from Urine, evaporated to the Consistence of Honey, and putrified; or whilst it remains fresh, provided it be mixed with four times its own Quantity of Sand, or an equal Proportion of any fixed alkaline Salt. Urine, with the Addition of Quicklime, affords only an exceeding pungent Spirit. *E.*

In the *Pharmacopœia Reformata*; we are told, that of all the Preparations, which the Chymical Pharmacy supplies us with, there is no one in greater Esteem, or more universally prescribed, than the Spirit of Hartshorn; and yet perhaps there is no Medicine, whose Dose is more precarious and uncertain; for as the Spirit is nothing but the volatile Salt dissolved in Phlegm, so the Strength of the Spirit must be in Proportion to the Quantity of Salt contained in it, and this will vary according to the particular Circumstances of the Hartshorn, and as the Distillation, in rectifying it, is contained for a longer or shorter Time; and hence it is that we hardly ever meet with it twice of the same Strength in the Shops; but this Inconvenience might be avoided, and a certain Degree of Strength always kept to, by continuing the Rectification no longer

than till the Salt is almost dissolved; and the Physician might, without Impeachment of his Judgment, insist upon this Caution being observed, which whether complied with or not, will easily appear upon Examination.

The Chymical Properties and Virtues of a pure, volatile, alkaline Salt, are principally these: It makes an Effervescence with all the known Acids, as strong and as durable as a fixed alkaline Salt; closely joins the Acid with itself, and retains it so as to form a compound Salt according to the Nature of the Acid: And thus, when fully saturated, it increases $\frac{2}{3}$ in its Weight. Whence we may understand the requisite Proportion for making the Balance betwixt an Acid and an Alkali, and how much of either may be again expected upon the Resolution of these compound Salts. But as soon as the Point of Saturation is exactly gain'd, the Action of the Salt, so produced, is neither to be estimated from the Acid or the Alkali of the Composition, but from the new Nature the compound Salt has acquired. And hence the Error of those may be easily confuted, who conceive that the Virtues of compound Salts are such as they observe in the Parts produced by a Separation. 2. This Salt, actuated with the Heat of a healthy Body, presently inflames, burns, and causes a gangrenous E-scar, and therefore perfectly destroys all the Parts of the human Body, to which it is so apply'd, as that its Motion, arising from the Heat, may be driven in upon the Part. Thus, if a Scruple of the pure volatile Salt of Hartshorn be laid upon the Skin, and covered with an adhesive Plaster, it will in half a quarter of an Hour, raise a black Carbuncle, as if a Piece of hot Iron had been there applied; and the Colour, Pain, Heat, and Hardness of the Skin are also the

the same as they would be in that Case; and it resolves the Humours into a thin, sanious Liquor. It is the most moveable Body of any hitherto known, as exceeding even *Alcohol* in Volatility: For if *Alcohol*, Water, and this Salt be put together in a tall chymical Glass filled, with an Alembic-head, and a small Degree of Heat be applied, the Salt will rise by itself into the Head, long before the *Alcohol*; the *Alcohol* will next follow, and the Water at last with Difficulty. And thus this Salt flies off from every heated Point; and if laid upon the warm Hand, it presently flies away without hurting the Hand, as in this Case its Reaction is not great upon the heating Body; wherein it greatly differs from the fixed alkaline Salt, which adheres by its Weight. But when those volatile alkaline Salts are received into the Vessels of the Body, and there actuated by the vital Powers, and the Force of the circulating Fluids, they act very powerfully by a sharp, stimulating, and corroding Virtue; especially upon the more sensible fine Fibres of the nervous System, which they excite to greater Motion; and at the same Time thinning the Humours, promote Perspiration, Sweat, Urine, and Saliva. They likewise frequently prove serviceable, when their Exhalations are receiv'd along with the Air, into the Nostrils; for thus they irritate the *Membrana Pituitaria* of the Nose, Mouth, Jaws, Lungs; and, by irritating thereof, dissolve the viscous Phlegm, which may adhere thereto, provided they be used with Caution. These Salts, therefore, are proper, and have very good Effects, in aqueous, acid, austere Distempers of the Humours, as also in Torpidity of the nervous System, and disorderly Motions of the Spirits, rushing irregularly and involuntarily into particular Muscles. And hence they

excellently cure hypochondriacal, hysterical, epileptical, and spasmodical Disorders. Being diluted with Water, and received in the Form of Vapour into the *Vagina Uteri*, they are esteem'd one of the most immediate Remedies, when prudently applied, for promoting the Menstrues, if required. But they prove poisonous in alkaline and putrid Disorders, where the Humours are dissolved, and the Body already too much agitated. They may also be externally apply'd, by way of a Caustic, for the making of Issues, the extirpating of Warts, and taking off Styes upon the Eyelids. The Method of using this Salt in these Cases, is by laying it upon a little Pellet of Lint; and applying it to the Part; then covering it with an adhesive Plaster, and leaving it thus, till it may be thought to have performed its Office: Thus far *Boerhaave*.

The volatile Salt of Hartshorn is by some so highly extoll'd, as almost to be pronounced an universal Medicine in Epilepsies, Apoplexies, Lethargies, Vertigoes, and in a Word, all the Disorders incident to the Brain. The same Virtues are ascribed to it in the Cure of hystERIC Fits, in opening Obstructions of the Viscera, in removing all Fevers, Disorders of the Kidneys, and the Bladder, the Plague, and the fatal Effects of all Poisons. It is no less extoll'd in rendering the Body soluble when costive, and reducing it to a due State, when it runs into the opposite Extreme; as also, in provoking the Menstrues, and at the same Time, giving a seasonable Check to them, when they flow immoderately. According to *Ettmuller*, *Moebius* informs us, that the volatile Salt of Hartshorn, duly exhibited, not only excites a Diaphoresis, but also a Vomiting. It is given internally mixed with other Substances, either in the Form of Powders, Pills, or Potions.

When put into a narrow-mouthed Glass, it is applied to the Nostrils for opening their Obstructions, created by a viscid Lymph. It is also used in the same Manner for recovering and animating apoplectic, epileptic, and hysteric Patients. If the Virtues of this Medicine are really so great as is pretended, and if it is indiscriminately proper in all the above-mention'd Disorders, there would scarcely be a Necessity for any other Medicine in the Shops, besides those of the refrigerating, emollient, and emplastic Kind, since the Effects produced by all the others might be expected from the volatile Salt of Hartshorn alone.

The rectify'd Spirit of Hartshorn, according to *Ettmüller*, is very much used in the Cure of Fevers, and acute malignant Disorders, in exciting a Diaphoresis; and removing Epilepsies. It penetrates the whole Body, corrects Malignity by its alexipharmic Quality, and expels it by a Diaphoresis. It corrects vicious Acids, and promotes the Eruptions of Pustules, Small-pox, and *Pétéchieæ*. Some account it an universal Medicine, and say that nothing is more proper in the Increase of malignant Disorders. *Ludovicus*, in his *Pharmacopœia*, calls it a highly penetrating Alexipharmic in most malignant Disorders, and an excellent Cephalic in those of the vertiginous and lethargic Kind, when apply'd to the Nostrils. *Sculzius*, in his *Prælectiones*, tells us, that it is exhibited internally from ten to thirty Drops; and that robust Country-men sometimes take a Dram of it in Brandy. It is of an aperient, antispasmodic, and sedative Quality. In Conjunction with a proper Regimen, it is highly diaphoretic; but when it has not the Advantage of this, it rather proves diuretic. In *Eph. Nat. Curios. Dec. 3, a 1. 691.* we are told, that, after the fruitless and ineffectual

Use of other Means, it happily cured a malignant epidemical Fever, which raged after a moderately warm and rainy Winter; for the Patients, after the Exhibition of it, were immediately freed from the Delirium, and convulsive Motions with which the Disorder was accompany'd. *Splæsus* informs us, that it produced a surprising Effect upon a Woman, who, in consequence of an intemperate Method of Living, labour'd under Indigestion, Loathing of her Food, Restlessness, and Loss of Strength. At last, being seized with such a violent fainting Fit, that her Case was judged desperate, half a Dram of the Spirit of Hartshorn was exhibited to her, without her perceiving it; immediately after which, she rose up, vomited Worms, and was in a surprising Manner snatched from the Jaws of Death. *Hoffman*, in his *Acta Laboratorii Altdorfenfis*, recommends its Use, by way of Topic, in the Cure of malignant, phagedenic, and cancerous Ulcers. He also orders a Mixture of it, with some proper Decoction, to be injected into Fistulas by means of a Syringe.

Sydenham recommends two, three, or four Drops of Spirit of Hartshorn, in a Spoonful or two of black Cherry Water, or of some proper Julap, five or six Times repeated, as an excellent Remedy against those feverish Disorders, to which Children are subject whilst breeding their Teeth. But to Adults it may be given in the Quantity of fourscore Drops, or more, if exhibited with a View of answering any Intention.

I shall say no more of the Virtues attributed to the Salt and Spirit of Hartshorn, which are by some celebrated with extravagant Encomiums, because their genuine Efficacy is specified in the preceding Quotation from *Boerhaave*. Mean time, I am abundantly sensible, that great Numbers of tender People do themselves in-

infinite Prejudice by habituating themselves to take large Quantities of Hartshorn Drops, and those frequently repeated, as this Custom paves the Way to Drums, excessive Disorders of the nervous Kind, and in the End Death. And it may be remarked, that it is no new Thing for a Medicine of great Importance, when duly apply'd, to become deleterious, by an improper, or too frequent Use. But if the Salt or Spirit of Hartshorn happens to be adulterated, which is generally the Case, the Consequences of taking it may happen to be much worse. Quincy, a pretty good Judge of Subjects relating to Pharmacy, observes, that these Preparations have hitherto stood in the Front of nervous Medicines; but the wicked Sophistications of our Chymists have debased them into Disregard, and almost expel'd them out of Practice. To give the Spirit an uncommon Pungency and Quickness of Smell, which is all they want to recommend it to Sale, a Way has been found to quicken it with Lime, and urinous Volatiles; and they have been so hardy herein, as to own it, and give it a Place in their Catalogue, of *Spiritus Cornu Cervi cum Calce*, Spirit of Hartshorn with Lime. And now the Fraud is so far improved, that they will make it without any Hartshorn at all, but with Bittern, that is, the Brine which they get from the Salters, Urine, and Lime, which will raise a strong scented Spirit; and this these very honest Men, give some Scent and Colour to, with a little of the fetid Oil of Hartshorn, and put off for what is genuine; or without that Oil, for Spirit of Sal Ammoniac. So that from eight and ten Shillings per Pound, which the genuine Medicine deserved, these Gentlemen, to oblige a good Customer, can afford it now for as many Pence. But a curious Person may

pretty easily discover this Cheat, by the rancid urinous Smell of the sophisticated Sort, and its whitening the Inside of a Glass in which it is long kept. The volatile Salt too, which is now sold in the Shops for that of Hartshorn, is a perfect Cheat, and more a Caustic than a Cordial, by the Quantity of Lime and urinous Salt that is thrown up with it; whereas that which is carefully to be collected in the Distillation of the Spirits, about the Top and Neck of the Receiver, is truly an Animal volatile Salt, soften'd with such a Portion of a highly subtilized Oil, as renders it an admirable and agreeable Medicine; but this is never to be met with, or made Use of, unless the Physician will be at the Trouble of attending the Laboratory, or find a Person honest enough to make it on purpose for him: For one Dram of this genuine Salt may be stretched out into a Pound of that used in the Shops.

Oleum Animalium.

Oil of Animals.

Take any Oil distilled from Animal Substances, that of human Blood, for Instance, that of Worms, Ivory, or Hartshorn; and, without the Addition of any Thing, let it be drawn off from a Glass Retort, and rectified to such a Degree, that no black and burnt Faces may remain in the Bottom; which can scarce be obtained by twelve repeated Distillations.

This Oil, which was before thick, and of a disagreeable and fetid Smell, gradually assumes a more grateful one, and becomes more pungent to the Taste.

Twenty or more Drops of such an Oil taken on an empty Stomach, before the Access of an intermitting Fever, bring on a calm and gentle Sleep, and wonderfully carry off feverish Disorders. This is also an

efficacious Medicine for the Cure of Epilepsies of long Standing, and allaying convulsive Motions, especially when taken before the ordinary Time of the Access, and when such Medicines have been previously used, as are proper for evacuating the too great Quantity of Humours.

It produces its Effects by its gentle, safe, anodyne, and somniferous Qualities; for it produces a calm and pleasant Sleep, which often lasts for twenty Hours, and which is so far from being followed by Drowsiness, Torpor, and Weakness, that it rather exhilarates and enlivens the Body. Besides, it promotes a gentle Sweat, without increasing the Heat of the Blood. The Effects produced by this Medicine are owing to the prodigious Smallness of its sulphureous Parts, occasioned by its frequent and reiterated Rectifications; and since its sulphureous Particles, in consequence of their Subtily, penetrate all the smallest Meanders of the Parts, and diffuse themselves thro' the whole Mass of Humours, the Tensity and Elasticity of the *Dura Mater*, and of the whole nervous and membranous System, the depraved and preternatural spasmodic Motion of which is the very Essence and Cause of intermitting Fevers, and epileptic Motions are by this Medicine so much changed and diminished, as afterwards to become unsusceptible of such spasmodic Motions.

By this Observation we are taught, that uncommon medicinal Virtues are treasured up in the minutest Particles of sulphureous and oily Substances; which Circumstance is owing to their reaching the inmost Recesses of the solid Parts, especially those of the Nerves and Membranes; upon the due Form and Motion of which, almost all the Functions and Motions of our Bodies depend.

This also proves, that the hottest Medicine, and such as when administered in a very small Dose, is sufficient to throw the whole Mass of Blood into a vastly quick Motion, may be render'd so mild and safe, that when exhibited in a larger Dose, it shall be so very far from increasing the Motion of the Blood, that it will rather quell it, and induce a moderate Calm; and we plainly find that this Circumstance is owing only to the Change produced in the Texture of the Medicine; that is, by rendering the tenacious viscid Oil as subtle as possible.

In fine, this explains and accounts for the anodyne and somniferous Qualities of Camphire, which is no more than a most subtle coagulated Oil when prudently used, and as Exigencies require. *Frederic Hoffman* gives this Character of the rectify'd Oil of Animals; and others affirm, that it is certainly possessed of many and considerable Virtues. Its Character is, that it is a most excellent Remedy against the Plague, or any pestilential Disorder: It cures the Pleurisy, it strongly fortifies Nature, it cheers the Heart, and revives the Spirits; it causes a free Circulation of the Blood, and thoroughly cleanses the whole Mass, and clears the Skin from erisipelatous Scurs and Scabs. It cures the Itch, Scald Heads, Tetter, Ringworms, &c. It is most powerful in the Cure of the Leprosy or Elephantiasis; it opens the Obstructions of the Liver and Spleen; it cures Disorders of the Head and Brain, as Lethargies, Apoplexies, Megrims, Vertigoes, Convulsions, Palsies, &c. It strengthens the Stomach, and helps Digestion; it surprisingly prevails in Faintings, Swoonings, and Palpitations of the Heart. A safer, speedier, better, or more effectual Medicines is not

to be found in the whole Art of Physic. Its Dose is from twenty to thirty Drops upon a Lump of Sugar, drinking after it a Glass of Wine.

Spiritus, Sal, & Oleum Fuliginis.

Spirit, Salt, and Oil of Soot.

Distil Wood Soot in the same Manner as Hartshorn, but here more Labour is required to render the Spirit and Salt pure. *L.*

These are said to possess the same Virtues as the Spirit, Salt, and Oil of Animals. The Spirit is at present much us'd in epileptic Cases, and Disorders which affect the Nerves.

Sal Ammoniacum factitium.

Factitious Sal Ammoniacum.

Take of human Urine, or that of any Kind of labouring Cattle, three Quarts; of Sea Salt, two Pounds; of Wood Soot, one Pound, and boil them together into a Mass; put this into proper subliming Pots, and urge it with a gradual Fire to sublime the Salt; which will become purer by repeated Solutions in Water, Filtration, and Evaporation, continued till it remains dry; as also by repeated Sublimation. But this is brought from Abroad ready prepared to our Hands. *E.*

Spiritus Salis Ammoniaci.

Spirit of Sal Ammoniac.

Take of Sal Ammoniac, and Salt of Tartar, each a like Quantity; grind them separately, then mix them together, and put them into a Glass Retort, and pour thereon as much Spring Water as will serve to dissolve the Salts; then distil the whole in a Sand Heat, till the Salt that is caked in the Receiver is dissolved by the rising Liquor. If the Receiver be taken away before any Moisture rises, you

will obtain the *Sal Ammoniacum volatile*, or a volatile Sal Ammoniac. *E.*

In the *London Dispensatory* it is thus directed:

Take of any fixed alkaline Salt, a Pound and a half; of Sal Ammoniac, a Pound; of Water, two Quarts. With a gentle Fire distil off one Quart.

Sal volatilis Salis Ammoniaci.

Volatile Salt of Sal Ammoniac.

Take of the finest Chalk or Whiting, two Pounds; of Sal Ammoniac, one Pound. Sublime the volatile Salt in a Retort with a strong Fire. *L.*

The alkaline Spirit of Sal Ammoniac is a Water, impregnated with as much pure alkaline Salt as it can dissolve, and with this likewise all the other alkaline volatile Spirits may be compared; and indeed, no other volatile alkaline Salts and Spirits are ever so pure and genuine as these, but constantly infected by some Oil, which occasions them to act very differently. This Salt and Spirit instantly make a violent Effervescence with all Acids. If the Glass, containing either this Salt or Spirit, stand open near another filled with the strong acid Spirit of Nitre, there immediately arises a considerable Effervescence in the Air, proceeding from the volatile Acid and Alkali meeting therein. If this Salt be applied to the warm Skin, and kept close to it by a Plaister, to prevent its Exhaling, it presently burns the Part with intolerable Pain, and with a violent Inflammation turns it to a black Gangrene, so that there is scarce a more sudden Poison. Whence it should seem imprudent to direct the Use of those Salts or Spirits in the Way of Smelling-Bottles, for fear of corroding and inflaming the

the Olfactory Nerves, the Membrane that lines the Nostrils, and the tender Vesicles of the Lungs. Both this Salt and Spirit are render'd still more fiery by subliming them afresh, from pure, dry, fixed Alkali.

Spiritus Salis Ammoniaci dulcis.

Dulcify'd Spirit of Sal Ammoniac.

Take of any fixt alkaline Salt, half a Pound; of Sal Ammoniac, four Ounces; of Proof Spirit, three Pints: Distil off with a gentle Fire, a Pint and a half. *L.*

This is used in making the *Spiritus Volatilis Aromaticus*.

Flos Salis Ammoniaci.

Flowers of Sal Ammoniac.

Take any Quantity of dry powder'd Sal Ammoniac, put it into an earthen Cucurbit, fit to it a blind Head, and sublime the Flowers, by gradually increasing the Fire. *E.*

Sal Ammoniac is half volatile; for tho' it will not ascend with the Heat of Boiling-water, yet it is not so fixed as Sea Salt. When thus purify'd, it loses the Transparency, which is in some Measure found in common Sal Ammoniac. This Salt does not grow alkaline by Sublimation; in which respect it differs from the Salt of Urine, as still remaining what it was, tho' more purified. It has this wonderful Property, that by thus rising dry in a close Vessel, it carries up with it almost all Animal, Vegetable, and Mineral Substances, and strangely subtilizes them in the Sublimation; whence it has been called, the Pestle of the Chymists; as those Bodies could scarce be so subtilized by any other Means. But if often sublimed with Sal Ammoniac, they are thus at length fixed therewith: And in this Method excellent Medicines are often prepar'd.

Butyrum Cereæ.

Butter of Wax.

Half fill a Glass Retort with fine Wax, cut into Pieces small enough to enter the wide Mouth thereof; then pour clean Sand upon it, so as to fill the Retort, which is now to be gently warmed till the Wax melts, and sufficiently imbibes and mixes among the Sand: Set the Retort in a Sand Furnace, apply a Receiver, and distil with a gradual Fire: There usually first comes over a little tartish Water, of a disagreeable fetid Odour, along with a little Spirit: When with a gentle Heat nothing more ascends, change the Receiver, and raise the Fire, by which means there will gradually arise a thin Oil of a whitish Colour, and concentered, like Butter, in the Receiver. When this ceases, apply a violent Fire of Suppression, upon which the whole Body of the Wax will soon come over into the Receiver, and there appear in a solid Form, like Butter, having lost the hard brittle Nature of Wax. So much Sand should be here mixed with the Wax, as to prevent its explosive Swelling, which would otherwise happen in the Boiling.

The Butter of Wax, thus prepared, affords an extremely soft anodyne Unguent, agreeable to the Nerves, highly emollient and relaxing; and, when rubbed upon the Parts, proves serviceable in Contractions of the Limbs, and successfully preserves the Skin from Roughness, Dryness, and Cracking in the Cold, or the Winter: It also proves excellent in the sharp Pains of the Piles.

See the Articles *Apes* in the *Materia Medica*.

Oleum.

Oleum Cere.

Oil of Wax.

Melt the Butter of Wax over a gentle Fire; to a liquid Oil; then pour it thro' a Funnel, first well heated, into a Glass Retort, also well heated beforehand, so as to half fill the Retort, with Care to prevent any of the Butter from sticking to the Neck thereof, because in that Case the gross Matter would fall into the Receiver, which should here be avoided. Set the Retort in a Sand Furnace, lute on a clean Receiver, and distil cautiously, managing the Fire so, that one Drop may follow another at the Distance of six Seconds; when nothing more comes over with this Degree of Heat, raise the Fire, and distil as as before, and continue in this Manner, increasing the Fire with the same Caution, so long as any Butter remains in the Retort; and, by this Means, all the Butter will come over, scarce leaving any Faeces behind; and a thickish Oil, not much diminished in Quantity, will be found instead of Butter in the Receiver. If this Oil of Wax

be again distilled in like Manner, it always becomes more limpid, soft, transparent, and thin, so as at last to resemble a subtle, limpid Oil: And the oftener the Distillation is repeated, the more mild and gentle, yet the more penetrating the Oil becomes.

This last Oil of Wax is an incomparable Remedy for the Diseases of the nervous *Papillæ* on the external Skin; and has scarce its Equal in curing chapt Lips in the Winter, chapt Nipples in the Women who give Suck, and in the Cracking of the Skin of the Hands and Fingers, being sometimes gently anointed thereon. It is also serviceable in discussing cold Tumors arising on the Face or Fingers in the Winter; and curing contracted Tendons, and the Rigidity of the Limbs thence arising, being used along with Baths, Fomentations, and Motion; for it has a singular Virtue in thus restoring Flexibility to the Parts: Being frequently rubbed upon the Abdomen, it prevents Costiveness; and is therefore excellent in effectually curing the Diseases of Children.

C H A P. III.

CHYMICAL PREPARATIONS of MINERALS.

Preparations of Salts.

Spiritus Salis.

Spirit of Salt.

TAKE of dried or decrepitated Sea Salt, a Pound; and three Pounds of Brick Dust. Mix them, and put them together into an earthen Retort, whereof they may

fill but one half; place the Vessel in a reverberating Furnace, and fitting it with a capacious Receiver, keep a slow Fire at the first, increase the Heat, till all the Spirit shall, like Clouds, be driven into the Receiver; when the Vessels are cold, pour out the Liquor into a Glass Cucurbit, and rectify, that

that a pure Spirit may remain after the Phlegm is drawn off by a gentle Distillation. *E.*

Spiritus Salis Glauberi.

Glauber's Spirit of Sea Salt.

To three Parts of Sea Salt well depurated and crystalized, and put into a Glass Retort, pour one Part of the strongest Oil of Vitriol; at the Instant they mix, a volatile white Vapour rises out, which is to be carefully avoided, as being suffocating, and capable, if but once drawn in with the Breath, to stop the Action of the Lungs irretrievably. Directly apply a large and cold Glass Receiver, lute the Juncture, apply a very small Quantity of Fire at first, for a Spirit will long continue to come over, so furiously, as to blow thro' the Luting, or break the Vessel; so that the Fire must be kept gentle for three or four Hours; then increase it a little, and a less volatile Liquor will come over. After eight Hours have been employed upon the Operation, urge the Fire till the Iron Pot becomes ignited, and no more Liquor rises; then let all cool; and when the Neck of the Retort is no longer hot, take off the Receiver, the Liquor will fume; and beware of receiving it in with the Breath. Pour it into a Glass, well fitted with a Glass-stopper, and set it in a cold Place, otherwise the Glass often bursts, by means of the Motion of the Vapour. If thus kept for Years, a white suffocating Vapour immediately breaks out upon opening of the Vessel; but if the Spirit thus produced be carefully distilled in a Glass-body, under a Chimney, into a Receiver, the volatile Spirit will come over, whilst there remains at the Bottom a more fixed Liquor, of a Colour betwixt a yellow and a green. This Li-

quor remains quiet without exhaling; but that which comes over into the Receiver, has a violent suffocating Volatility, and may be kept apart, as a pure volatile Spirit of Salt, in a close Vessel. Or,

To three Parts of purify'd and dry Sea Salt, put into a Retort, add two Parts of clean Rain Water, and one Part of the strongest Oil of Vitriol. Let the Oil of Vitriol fall in by slow Drops, to prevent bursting the Vessel, by the sudden Heat that would rise from mixing in the whole at once. The Mixture will grow hot; place the Retort in a Sand Furnace, and apply a capacious Receiver; distil gently for the first Hours, while the Water comes over slowly, otherwise, if made to rise briskly, it always cracks the Receiver. After this, increase the Fire gradually; the Spirit of Sea Salt will come over, which is then known to rise, when the Liquor runs in spiral Veins. Now raise the Fire, and gradually urge it, till at length the Pot grows of a red Heat, and no more Liquor comes over; at which Time the Spirit will not fume. Then suffering all to cool, pour out the Spirit, which is now neither suffocating, nor smoking. If this be distilled again with a gentle Fire, in a Glass Body, there will come over a limpid, ungratefully acid Water, of excellent internal Use, being mixed with Juleps, in such Distempers as require it; an excellent oily Spirit will remain in the Bottom, of a Colour betwixt green and yellow.

In both Cases there will be left behind a very white and fixed Salt, that can only be fused by a violent Fire.

Spirit of Salt is particularly grateful to the Stomach, excites the Appetite, attenuates mucous Humours, resists

resists Putrefaction, corrects the Bile, when either too acrimonious, large in Quantity, or corrupted. It is of excellent Use in curing Gangrenes of the Gums, Mouth, or Tongue; it prevents the Generation of the Stone; and, according to *Helmont*, helps to dissolve it: It is serviceable in the Strangury attending old Age. If the strongest Spirit of Salt be mixed with thrice its Weight of Alcohol, and the two be thoroughly united together, by two or three Distillations, they make a volatile, oily, acid, fragrant, and balsamic Spirit of great Virtue.

Frederic Hoffman remarks, that the highly penetrating and subtile Nature of this Acid is obvious from this, that in a gentle Heat, or even in *Balneo Mariæ*, it passes over the Helm of the Alembic; and when plac'd in open Glasses, so exhales as soon to fill the whole Room; and that the penetrating Nature of this acid Salt surpasses that of Nitre, I am induced to believe, because the Acid of Salt has a freer Access into the Pores of Gold than that of Nitre, which dissolves all other Metals; for without an Addition of common Salt, the firm Compages of Gold cannot be dissolved. So great is the Subtily of the Acid of common Salt, that when taken internally, it diffuses its Operation and Efficacy to remote Parts, especially those of the membranous Kind. But it in a particular Manner exerts its Influence on the nervous and sensible Membranes of the Lungs, by stimulating and agitating which, it excites a gentle Cough; for which Reason, the Acid of common Salt ought to be very cautiously used; it also by its powerful Stimulus, penetrates to the urinary Passages; for there is hardly a more efficacious Medicine for exciting a Discharge of Urine, than Spirit of common Salt. Those who have Fontanels in their Bodies,

and frequently use Spirit of Salt in Broths prepared with Flesh, perceive pungent Pains in their Fontanels. The great Subtily also of this Spirit, is the Reason, why by acting on the nervous Coat of the Stomach, it excites the Appetite far better than all other acid and mineral Spirits. Strongly concentrated Spirit of common Salt has this peculiar to it, that it does not, like other corrosive and highly concentrated Acids, such as Oil of Vitriol, and fuming Spirit of Nitre, by the Addition of a sufficient Quantity of highly rectified Spirit of Wine, lose its acid Taste, and assume a sweet Taste and Smell. The strong Acid of common Salt remains entire in the Bottom of the Cucurbit; for 'tis sufficiently known to Chymists, that Oil of Vitriol, after the Addition of a sufficient Quantity of highly rectified Spirit of Wine, at different times, may, by Distillation, be converted into a very penetrating Spirit of a grateful Taste and Smell. Thus also the fuming Spirit, upon an Admixture of twelve Parts of highly rectified Spirit of Wine, becomes sweet, and assumes a grateful Taste and Smell; because by the oleous and sulphureous Parts of the Spirit of Wine, the Acid Spiculæ are so corrected and sheathed up, as to assume a quite different Nature, Texture, and Efficacy. But this is not found to happen in the Spirit of Salt, which rejects this Union of the oleous and phlogistic Spirit, for it retains its Acidity entire, except that its thinner sulphureous Part being united with the inflammable Spirit, in some Measure changes its Smell, and renders it more grateful.

'Tis also peculiar to Spirit of Salt above that of Vitriol, and Nitre, that it does not so quickly dissolve Filings of Steel, but leaves the *Lapis Hamatilis* and the most subtile *Crocus Martis* entirely untouched; whereas common Salt, or, which is

still better, *Sal Ammoniac* acts more quickly and powerfully on Chalybeate Minerals, the *Lapis Hæmatitis*, and Filings of Steel, and by dissolving them, converts them into a highly astringent Vitriol, provided they are intimately mixed in a Crucible, and kept on the Fire for a considerable Time, which neither happens with Vitriol nor Nitre.

No Acid so soon extracts the Sulphur, with which Iron is richly impregnated, as the Acid of common Salt; for whether a Solution of Steel with Spirit of Salt, is inspissated, or whether *Sal Ammoniac*, with Filings of Steel, is treated by a close Fire, a Vitriol is obtained of a yellowish Colour, an astringent Taste, a grateful Smell, and which is not capable of Crystallization, but melts away in the open Air; and if duly dephlegmated Spirit of Wine is poured upon it, the sulphureous Part of the Steel, and the thinner Portion of Salt immediately enters it, and by this Means is prepared a Tincture of Steel, which is of a yellow Colour, a fragrant Smell, a subastringent Taste, and highly efficacious in restoring the Tone of the Parts; for by this Means the sulphureous Substance of Steel, which is of great Use in Medicine, may be most commodiously separated. 'Tis, also, to be observed, that highly concentrated Spirit of Salt, when mixed with Oil of Vitriol, produces a greater Effervescence, than any other acid Spirit.

In the *London Dispensatory*, the *Spiritus Salis Marini Glauberi* is thus directed:

Take Sea Salt, and the strong Spirit of Vitriol, of each two Pounds; of Water one Pint. The Oil and Water being first mixed together add the Mixture gradually to the Salt under a Chimney, then distil first with a small, and afterwards with a stronger Fire. *L.*

Spiritus Salis Dulcis,
Sweet Spirit of Salt.

Take one Part of Spirit of Salt, and three Parts of rectified Spirit of Wine; digest them together for some Days in a large Glass Vial, then distil according to Art in a Sand Heat, taking Care towards the End of the Operation, that the Retort break not with a too violent Fire.

See the Remarks on *Glauber's Spirit of Salt*.

Spiritus Salis Marini coagulatus.

Spirit of Sea Salt coagulated.

Pour gradually upon the Spirit of Sea Salt the Lixivium of any fix'd Alkali, till all Fermentation ceases, and then evaporate to Dryness. *L.*

In this Preparation the fix'd Alkali, of which the Spirit of Salt had been depriv'd, is again added, so as to form a Salt exactly resembling common Sea Salt; and possessed of no other Virtues that I know of. It is properly called *Regenerated Sea Salt*.

Sal Catharticus Glauberi.

Glauber's Cathartic Salt.

Dissolve in Water the Cake, which remains after the Distillation of *Glauber's Spirit of Sea Salt*, purify the Solution thro' Paper, and then duly evaporate it that the Salt may crystallize. *L.*

This is the Salt commonly known by the Name of *Sal Mirabile Glauberi*, or *Glauber's Salt*.

Glauber, the Inventor of this Salt, called it by this Name of Wonderful, not only on account of its being new, but of the surprising Effects it produces. Some Chymists that are fond of Systems pretend, that no more than a true *Tartarum Vitriolatum* is here produced, which was long known before the Time of *Glauber*. But

But *Tartarum Vitriolatum* has not the Properties which are found in this Salt, either with respect to Figure, Taste, Effects, or any thing else: For if this Salt be properly prepared, reduced to Powder, and mixed with thrice its Weight of Vinegar, Beer, Wine, or Water, and set apart, it freezes them. When melted in a Crucible, if a fourth Part of Antimony be thrown to it, by a Piece at a time, it wonderfully dissolves it.

In Surgery, this Salt is of excellent Use against Putrefaction and Gangrenes: It is, also, of Use, when internally taken, by gently stimulating, resolving, purging, and promoting of Urine. Perhaps there is not a better gentle Punge. But we very seldom or never meet with it in the Shops of Chymists; for the *Sal Catharticum* is generally sold instead of it. The common Dose is half an Ounce; but it may be exhibited in larger Quantities. And it may with good Effect be given in very small Doses, frequently repeated, as a Cooler, and Deobstruent; the Patient drinking copiously of some diluting Fluid.

The Refinement and Crystallization of Nitre.

Dissolve common Nitre in six times its Quantity of boiling Water; strain the hot Lixivium quick; put it into a clean cylindrical Vessel, and exhale it over a clear Fire, to a Pellicule; set it in a cool Place, with clean Sticks a-cross the Vessel; there will presently be formed long prismatic, hexagonal, transparent Crystals. Collect these, and put them into an earthen Colander, that the Liquor may drain from them; afterwards dry the Nitre in the open Air. Or Dissolve Nitre in eight times its Quantity of boiling Water; filter the Lixivium; then drop therein some pure Oil of Tartar; mix them well, then drop in more, and

continue to do thus, till the Liquor appears no more disturbed. Boil the Lixivium for a single Minute; strain it hot to make it perfectly clear; exhale to a Pellicule; pour it out into a clean cylindrical Vessel, with little Sticks laid a-cross, and let it stand in a quiet Place. Prismatic Crystals, like the former, will thus be formed. No Experiment shews, that any Alkali here adheres to the Crystals of Nitre, which is thus made pure; nor does it appear, that any Method can afford it purer.

Let the Lixivium, that remains after this first Crystallization, be diluted with an equal Quantity of fair Water, then boiled for a Moment, filtered hot, inspissated to a Pellicule, and set in a cold Place, as before; it will thus shoot into Crystals of pure Nitre, which are to be dried as above. The remaining Lixivium being again treated in the same manner, and again set to crystallize, yields more of them. And now the remaining Liquor, which is fat and sharp, will afford no more Crystals, and dries with great Difficulty; and this happens, not only when Alkali has been used in the Refining, but also when nothing but pure Nitre was added.

By this means an excellent Nitre is procured for Medicinal Use, being very light, of a particular bitterish Taste; and, when taken into the Body, it easily dissolves therein, wonderfully cools and thins the Blood, giving a florid Colour thereto, and checking the Inclinations to Venery. It is changed in the Body, not being unalterable therein like Sea Salt, but turning into the human Salt. If the moist or solid Parts of Animals be salted with this Nitre, they are thereby kept extremely red, and free from Putrefaction; whence in all inflammatory Distempers, attended with

with an inflammatory Condensation of the Blood, this Salt proves excellently attenuating; and at the same time, no way offends by any violent Acrimony, nor proves prejudicial by its Weight. It does not occasion Thirst, and prevents the Salt of the Body from turning alkaline, and the Oil from putrefying: And on this Account, it may properly be called an antiphlogistic Salt.

Sal Prunellæ.

Salt Prunella.

Take of purified Nitre reduced to Powder two Pounds; fuse it in a Crucible, and gradually sprinkle thereon an Ounce of the Flowers of Sulphur; when the Deflagration is over, pour out the melted Salt upon a Copper Plate, first made clean, dry, and hot, so as that the Salt may be formed into thin Cakes. *E.*

Boerhaave says, that Nitre thus prepared, entirely agrees in Virtue and Use, with purified Nitre, which last he prefers, and with very good Reason; for it sometimes sits easy on the Stomach, when *Sal Prunellæ* will not.

This Preparation has obtained the Name of *Sal Prunellæ* from the Germans, who observing that a certain Kind of epidemical Camp-Fever, attended with a dangerous black Quinsey, which they call, *Diebraune*, was happily cured by the Use of this Powder; they thence called it by that Name.

Sal Polychrestum.

Salt of many Virtues.

Take of powder'd Nitre, and of the Flowers of Sulphur, each a like Quantity, mix them well together, and, by degrees, throw them into an ignited Crucible. After the Deflagration ceases, keep the Crucible in the Fire for one Hour;

then purify the Salt, by dissolving it in hot Water, filtering the Solution, and exhaling it till it becomes dry. *E.*

Physicians, especially those of *Paris*, having thoroughly experienced the Virtues of this Salt, called it *Polychrestus*, because of its various Effects, and proving successful in many different Diseases. If taken upon an empty Stomach, by a Person in Health, in the Quantity of two Drams, diluted with twenty times its Quantity of Water, the Person walking gently after it, and drinking four or six Ounces of new Whey, for three or four times, it sometimes proves gently vomiting, often purgative, but always diuretic and sudorific, so often as it is determined to operate that Way by Heat, Motion, and Sudorifics. It cuts cold viscous Phlegm, resolves Inflammations of the Blood, opens the Passages, corrects the Bile, when tending to Putrefaction, excites it, when languid, and stimulates it with Gentleness and Safety. Hence being prudently given in chronical and acute Distempers, it proves curative: It almost certainly cures inveterate Tertians, without any Danger of Relapse, or without obstructing the Viscera: It securely cures Quartans, by gradually resolving the sluggish Matter thereof; and therefore has deservedly obtained the Name of the Salt of many Virtues.

Spiritus Nitri.

Spirit of Nitre.

This is distilled from Nitre, in the same Manner as Spirit of Salt. *E.*

Spiritus Nitri Glauberi.

Glauber's Spirit of Nitre.

Take of Nitre three Pounds, of strong Spirit of Vitriol one Pound. Let them be mixed with Caution, and gradually under a Chimney; afterwards

afterwards let them be distilled first with a gentle Heat, and then with a stronger. *L.*

The principal Use of Spirit of Nitre is, to dissolve Metals and Minerals for Medicinal Uses; and to make the *Spiritus Nitri Dulcis*.

Spiritus Nitri Dulcis.

Dulcified Spirit of Nitre.

Take of rectified Spirit of Wine one Quart, of *Glauber's* Spirit of Nitre half a Pound. Mix them by pouring the Spirit of Wine on the other, and distil the Mixture with a gentle Heat, as long as what comes off will not raise any Fermentation with a lixivial Salt. *L.*

In the *Pharmacopœia Reformata*, we are told, that the Direction of continuing the Distillation only till what comes over ferments with a fixed alkaline Salt, is sufficiently troublesome and unartful. If the Spirit of Wine be highly phlegmed, and six Parts, instead of four, be added, and the Spirit of Nitre be pure and strong, almost the whole Mixture will rise in the Heat of a Water-Bath, be greatly odorous, and sufficiently dulcified, so as not to give any, or but very little Marks of Acidity upon the Affusion of an Alkali. The Spirit of Nitre should be distilled from equal Parts of strong Oil of Vitriol, and well-dried Nitre, with a gentle Fire: And the Spirit of Wine should be drawn over from a thoroughly dried fixed alkaline Salt.

Upon thus mixing together Alcohol and Spirit of Nitre, there immediately arises a fragrant Smell, like that of Southern-Wood; *Boerhaave* says, that there is observed a high Degree of Effervescence betwixt this volatile Acid and pure subtile Oil, without the least Interposition of an

Alkali: And yet the Effervescence is almost fiery; so that if a lighted Candle were applied to the Vapour, the Inside of the Glass would appear on Flame, and the Whole instantly burst in a dangerous Manner. The oftener these two Liquors are digested, and distilled together, the more exactly they unite, and thus afford a perfectly acid and oily Salt, which has an actual preservative, balsamic, detergent, dissolving Virtue, and prevents the Putrefaction of the Bile. Being properly diluted, and prudently used, it presently gives a beautiful Whiteness to the Teeth; but if imprudently used, destroys them. It restores the Appetite, if depraved by a mucous Phlegm, or corrupt Bile, or if the Cause proceeds from a Weakness of the Stomach. It is a great Carminative; it is recommended as a Preservative against the Stone, and even as a Solvent for it. It was the famous Lithontriptic of *Sylvius* held at a very dear Price. It promotes Sweat, provokes Urine, allays Thirst, corrects a fetid Breath, and has particular Virtues in the Scurvy. It is conveniently taken upon an empty Stomach, to twenty or thirty Drops, or more, in Wine, Mead, or Beer.

Nitrum Vitriolatum.

Vitriolated Nitre.

Dissolve the Cake left after the Distillation of *Glauber's* Spirit of Nitre, as described above, in hot Water, and after purifying thro' Paper, evaporate, that the Salt may shoot. *L.*

This is commonly called *Sal Elixus Paracelsi*. It is a Diuretic, and is commonly sold in the Shops for vitriolated Tartar; a Fraud sometimes of pernicious Consequence.

Alumen usum.

Burnt Alum.

Let Alum be put into an iron or earthen Pot, and calcined as long as it rises up and swells. *L.*

This is often used as an Escharotic, to eat away proud Flesh.

Vitriolum Calcinatum.

Calcined Vitriol.

Put green Vitriol into an earthen Vessel, and calcine it with an open Fire as long as it exhales any Moisture; then take it out by breaking the Vessel, and set it by for Use, well closed from the Air. The Vitriol is most perfectly calcined, if, at the Bottom and Sides of the containing Vessel, it is become red. *L.*

Aqua Fortis simplex.

Single Aqua Fortis.

Take two Parts of Vitriol calcined till it becomes white, and one Part of powdered Nitre; mix them well together, and put them into an earthen Retort, whereof they may fill two thirds; then fitting a very large Receiver thereto, distil as was ordered of Spirit of Salt. *E.*

Aqua Fortis duplex.

Double Aqua Fortis.

Take of green Vitriol calcined to Whiteness, of powdered Nitre, as also of Clay dried and reduced to Powder, each a like Quantity. Mix them well together, put them into an earthen Retort, whereof they may fill two thirds, and distil as in making single *Aqua Fortis*. *E.*

In the London Dispensatory, *Aqua Fortis* is thus directed:

Take Nitre, green Vitriol not calcined, of each three Pounds; of the same Vitriol calcined, one Pound and half; mix all together, and distil with a very strong Fire as long as red Fumes arise. *L.*

Aqua Fortis composita.

Compound Aqua Fortis.

Take of Aqua Fortis sixteen Ounces in Weight, of Sea Salt one Dram. Distil to Dryness. *L.*

We are told, that our Chemists in Practice find a Difficulty in preparing, with their common *Aqua Fortis*, what is usually called Red Precipitate, but is here named *Mercurius corrosivus Ruber*; inasmuch, that some few, who make it with us, employ another compound Spirit: but the Success of the Process may be very well secured by distilling the *Aqua Fortis* first from a small Quantity of Salt; and for this Purpose such a Preparation is here inserted under the Title of *Aqua Fortis composita*.

Aqua Regia.

Take an Ounce of Sal Ammoniac reduced to Powder, put it into a large Cucurbit; by Degrees mix therewith four Ounces of the Spirit of Nitre, or double *Aqua Fortis*, and let them stand together in a Sand Furnace till the Salt is totally dissolved. *E.*

This is intended for the Solution of Gold, a Thing of very little Consequence in Medicine.

Spiritus & Oleum Vitrioli.

Spirit and Oil of Vitriol.

Take any Quantity of green Vitriol calcined till it becomes white, and afterwards reduced to Powder; put it into an earthen Retort so as

to fill one half, and place the Vessel in a reverberatory Furnace; then having fitted the Retort with a very capacious Receiver, and luted the junctures, distil with a Heat gradually increas'd to the extreme Degree, which continue as long as any Vapours arise. The Phlegm, Spirit, and Oil are to be separated by a Retort in a Sand Heat. The Phlegm comes over with a gentle Heat; the Spirit with a stronger, and the Oil remains. What remains in the Retort after the first Distillation is called by the Name of *Colcothar*.
E.

In the *London Dispensatory*, the Oil of Vitriol is called *Spiritus Vitrioli fortis*.

Spiritus Vitrioli dulcis.

Dilcify'd Spirit of Vitriol.

Take of strong Spirit of Vitriol, called the Oil, one Pound; of rectify'd Spirit of Wine, one Pint; mix them cautiously and by Degrees, and distil them with a gentle Heat, till a black Froth begins to rise; then remove all from the Fire, that this Froth may not swell over into the Receiver, and frustrate the Operation. L.

In the *Edinburgh Dispensatory* this Medicine is thus directed:

Take of rectify'd Spirit of Wine, four Pints; drop gradually and cautiously into it of Oil of Vitriol, six Ounces. Digest for three Days, and distil according to Art.

Both these seem intended to imitate the following Preparation.

Liquor Mineralis Anodynus Hoffmanni.

Fredric Hoffman's Anodyne Mineral Liquor.

Take of the best Oil of Vitriol, and Indian Nitre, each four Ounces:

Distil the Spirit from a Retort by a Fire, gradually raised to a great Briskness, about the End of the Process: Pour two Ounces of this Spirit cautiously and successively, into fifteen Ounces of highly rectify'd Spirit of Wine; then by a careful Distillation, we obtain an highly fragrant and aromatic Spirit. But in this Process, great Care is to be taken, that we neither fall short, nor exceed, in extracting the sulphureous Spirit, but endeavour to obtain the whole of it as pure and genuine as we possibly can; for as soon as the Phlegm is about to rise, with the crude acid Spirit, the Receiver is to be changed with all Expedition. But, as this sulphureous Spirit is not yielded entirely pure, and free from a Mixture of the crude and acid Spirit, it is to be rectify'd with an equal Quantity of Water, and duly shaken, by which means, the acid Principle will subside in the Water, and the sulphureous Spirit be distill'd pure and unadulterated. When all the Spirit is obtained, and the Phlegm just ready to come over, the former is to be immediately removed, and kept in a Vessel carefully closed. The mild and soporiferous Virtue of this Spirit may be still heightened, if before the Rectification with Water, we add to it some Quantity of the Oil of Cloves, which is to be duly mixed with it, by shaking both together in a Glass Vessel, closed with a Glass Stopper; for by this means, the Acrimony of the Oil of Cloves is destroyed; especially if afterwards both are mixed with Water, and duly incorporated by shaking; for thus the gentle, mild, and ethereal Quality is intimately united with this Spirit. It is a Matter of no Importance, whether this Compo-

sition is the genuine, anodyne, mineral Liquor of *Hoffman*, since the former is equally efficacious with the latter, in its gently stimulating, carminative, antiseptic, diaphoretic, and anodyne Virtues.

Gilla seu Sal Vitrioli.

Take any Quantity of white Vitriol, and dissolve it in a proper Proportion of hot Spring Water, filtre the Solution, and evaporate it till only one third remains behind; then set it in a cold Place for three Days, that the Crystals may shoot to the Sides of the Vessel, which are afterwards to be dried in the Sun. Exhale the remaining Liquor again till no more Crystals will shoot from it. *E.*

Quincy says, it works by Vomit, and is a gentle Puke enough for young Children, from three to eight Grains; and to grown People, from a Scruple to a Dram. It corrugates the Stomach into Contraction so soon, that it is fancied to come all up again, upon the first Ejection; and therefore some give as many Doses of it as they would have the Patient vomit; giving each in a Porringer, or Basin of Posset-drink, or Carduus Tea.

In the *London Dispensatory*, the Salt of Vitriol is thus order'd :

Take of white Vitriol, a Pound; of the strong Spirit of Vitriol, one Ounce in Weight; of Water, as much as is sufficient. Dissolve the Vitriol by boiling, then strain the Decoction thro' Paper, and, after proper Exhalation, set it in a cold Place, that the Salt may shoot. *L.*

I don't apprehend, that this is in any Degree better than that order'd in the *Edinburgh Dispensatory*.

Ens Veneris.

Flowers of Copper.

Take Colcothar of blue Vitriol, first

welledulcorated with Water, and dried; and of Sal Ammoniac, each a like Quantity; reduce them separately to Powder, then mix them together, and put them together into an earthen Cucurbit, whereof they may possess two thirds; place the Vessel with a bind Glass Head in a naked Fire, using only a moderate Heat at first, and increasing it by Degrees, as long as the Flowers rise of a yellow Colour inclined to red, which, when the Vessel is cooled, are to be carefully swept out with a Feather. *E.*

Boerhaave orders this Medicine to be prepared from the Colcothar of green Vitriol; and remarks, that when it is prepared with the Colcothar of blue Vitriol, it partakes of the Nature of Copper; but when green Vitriol is used, it is then more properly called *Ens Martis*, as being a Preparation of Iron.

Mr. Boyle promises great Effects from this Remedy, in Distempers proceeding from a Weakness of the Solids, as in the Rickets, or the like; and it is highly serviceable therein. *Helmont* also, in the Treatise he intitles *Butler*, greatly commends a like Preparation.

In the *London Dispensatory* this Medicine is thus directed, under the Title of,

Flores Martiales.

Martial Flowers.

Take of washed Colcothar of green Vitriol, or of Iron Filings, one Pound; of Sal Ammoniac, two Pounds. Mix and sublime them in a Retort, and mixing again the Bottom with the Flowers, renew the Sublimation, till the Flowers acquire a beautiful yellow Colour.

To the Residue may be added half a Pound of fresh Sal Ammoniac, and
the

the Sublimation repeated, and the same Process may be thus continued on as long as the Flowers rise duly coloured. *L.*

As I apprehend Mr. *Boyle* has been misunderstood, with respect to the Preparation of the *Ens Veneris*, I shall here transcribe what is said upon this Subject, in the Narrative of the Committee; together with the Remarks of the Author of the *Pharmacopæia Reformata*.

The Committee have substituted another Name for *Ens Veneris*, not only for the Sake of Propriety, but to remove the Occasion of the Mistake committed in our present *Pharmacopæia*, which has been followed by others, of directing the Preparation with blue Vitriol; whereas it was originally made with a chalybeate Vitriol by Mr. *Boyle*, the Author of it, as appears from his Account of the Colour of the Preparation, and the Property he ascribes to it, of turning a Tincture of Galls to an inky Blackness, tho' from his not knowing the Qualities of the Vitriol he used, he gave it the Name we have changed, and ascribes its Effects to Copper. Vitriols are of various Kinds; our Copperas scarce contains any Metal but Iron; the blue Vitriol, used by the Surgeons, abounds in Copper, tho' it is not destitute of Iron; in those of *Dantzick* and *Goslar*, both which Mr. *Boyle* recommends for this Purpose, Iron is the principal Metal; tho' they partake of Copper also, but in so small a Proportion, that when the Medicine is prepared with either of these two, it does not sensibly differ from that usually made from our Copperas. Whereas in operating with blue Vitriol, the Appearances are wholly changed. This Vitriol does not calcine red, which Mr. *Boyle* represents to be the Case in his Prepara-

tion of the Medicine. The Salt also, in its first Sublimation, rises not at all yellow, but of a greenish Blue; which in subsequent Sublimations becomes paler, and is changed by the Iron contained in that Vitriol into such a Hue, as a Mixture of the first Sublimation and *Flores Martiales* would compose. Therefore, when Mr. *Boyle* proposes the Hungarian Vitriol, as the most eligible for this Preparation, he either did not mean, what has been generally understood by it, the common blue Vitriol, or must never himself have made the Preparation with it.

Thus far the Narrative of the Committee. The Author of the *Pharmacopæia Reformata* tells us, that,

Having seen this celebrated Medicine faithfully prepared of blue Vitriol, exactly according to the Directions of the *London Pharmacopæia*; and finding the Sublimate to exactly agree with the Author's Description, not only in the yellow or reddish Colour, but likewise in turning an Infusion of Galls black; and entertaining no small Opinion of its medicinal Virtues, from the Account which Mr. *Boyle* has given of it, he was greatly surprised at the Remarks above, and therefore determined thoroughly to inquire into them. As to the Remark, that the Name was originally imposed on it by Mistake, and that Mr. *Boyle* usually prepared it of Steel, I consulted the Author's Works, and particularly the Places quoted above. In his Usefulness of Natural Philosophy, he tells us, that he and a Chymist endeavoured to imitate *Butler's Stone*, by a Preparation of calcined Vitriol; and finding the Medicine upon Tryal, tho' far short of what *Helmont* ascribes to his, yet no ordinary one. We did, says he, for the Mineral's Sake it was made of, call it *Ens primum Veneris*. The Preparation

he gives us is this: Take good *Dantzick* Vitriol, if you cannot get *Hungarian* or *Gossarian*; this mixed with Sal Ammoniac, and sublimed, will give a yellow or reddish Sublimate. In another Place, he says, Take of the best *Hungarian*, or, if you cannot procure that, of *Dantzick*, or any other good venereal Vitriol. Again, we have always preferred such Vitriol as abounds with Copper, before our common *English* Vitriol, which abounds with Iron. The *Caput Mortuum*, he observes, will run *per Deliquium*, into a thick and high-coloured Liquor, very much impregnated with the somewhat opened Body of Copper. The celebrated Author, in his Treatise of the Origin and Production of Volatility, speaking of this Preparation, says thus, In which, that vitriolate Corpuscles of the Colcothar are really elevated, you may easily find by putting a Grain or two of that reddish Substance into a strong Infusion of Galls, which will thereby immediately acquire an inky Colour; Steel, also, will give the Sal Ammoniac a notable Colour, and an ironish Taste. From the above Quotations and Experiments, it plainly appears, that Mr. Boyle not only preferred such Vitriols as abounded with Copper, but likewise usually, if not always, prepared it of such as were strictly venereal, and consequently, that the Name was not originally imposed on it by Mistake, but given to it with Propriety, since it really was a Preparation from Copper.

The Committee are pleased to assert, that blue Vitriol does not calcine red; that the Salt also, in its first Sublimation, rises not at all yellow, but of a greenish Blue. I had some Years ago, says our Author, seen this Preparation made, and once made it myself; both the Processes succeeded

in such a Manner, as to occasion the preceding Remark. Since the Publication of the Committee's last Remarks, I carefully repeated the Experiment with common blue Vitriol, which I calcined at two different Times; both the Calces were of a dark red Colour. I then mixed one Part of the calcined Vitriol with two Parts of well dried Sal Ammoniac, and ground them together in a Brass Mortar with a glass Pestle. When they were well mixed, I sublimed them with a smart Fire, some white Flowers arose at first, as Boyle himself has observed, which were soon succeeded with others manifestly yellow, without any Tinge of green or blue. To another Parcel of the Calx, I added two Parts of the Sal Ammoniac without drying it, and set the Mixture to sublime; before the Sublimation was finished, the Glass broke; this Sublimate appeared of a whitish Colour next to the Glass, and of a yellowish on its inner Surface. It was spotted in several Places of a bluish green Colour, which probably arose from some of the Copper liquefied and thrown up, by the aqueous Drops which had fallen from the upper Part of the subliming Glass, and which occasioned its being broke. Upon subliming some more of the Calx with dry'd Sal Ammoniac, a yellowish Sublimate arose, as in the three preceding Processes.

Lixivium Martis.

The Ley of Iron.

Set by the Residue after the Sublimation of the *Flores Martiales*, in a damp Place, that it may liquify by the Air. L.

Lapis Medicamentosus.

The Medicinal Stone.

Take Alum, Litharge, Bole Arme-
nic

nic, or *French Bole*, of each half a Pound; of the *Colcothar* of green *Vitriol*, three Ounces; of *Vinegar*, a Quarter of a Pint; dry the whole Mixture together over a Fire, till it grows hard.
L.

This is esteem'd a drying and astringent

Topic, and is recommended for fastening loose Teeth; preserving the Gums; drying Ulcers, and Eyes abounding with Rheum; and is sometimes dissolv'd in a proper Water, and injected into the Urethra, to check a Running.

CHAP. IV.

PREPARATIONS of SULPHUR.

Flores Sulphuris.

Flowers of Sulphur.

LET Sulphur be sublimed in a fit Vessel; and any Part of the the Flowers which may have con- creted, are to be reduced to Powder by a wooden Mill, or in a Marble Mortar, with a wooden Pestle. L.

The Sulphur, by this Sublimation, is attenuated and purified; in other Respects it is not changed; but thus it becomes very fit for internal Medicinal Use: For when thus divided, it exerts its Virtues to greater Advantage in the Body; and thus, also, it proves fitter for external Chirurgical Uses, principally when it comes to be mixed with Balsams, Liniments, and Unguents. *Paracelsus* directs these Flowers to be sublimed from the red Calx of *Vitriol*, and recommends them for the Cure of exulcerated Lungs. *Boerhaave* says, he made the Experiment, but without finding that these Flowers, which he so much commends, had greater Virtues than the common Flowers of Brimstone.

Flores Sulphuris loti.

Flowers of Sulphur washed.

Pour Water on the Flowers, to the Height of three or four Fingers above them, and boil them for a Time; then pour off this Water, and with fresh cold Water, wash the Remains of this away, then dry the Flowers for Use. L.

This Lotion is intended to take off a certain rough Acidity from the Flowers, to improve them for internal Use, and prevent them from griping.

Spiritus Sulphuris per Campanam.

Spirit of Sulphur by the Bell.

Let Sulphur be set on fire, under a Glas Vessel fitted for that Purpose, which is usually called a Bell, and the acid Spirit will drop from it, which is to be received into a Dish placed underneath. L.

Sulphur when lighted, burns only on its Surface, contiguous to the Air; its blue Flame consists of Fire, or the inflammable oily Part of the Sulphur, agitated by the Fire, and a mineral Acid, which is the other

constituent Part of the Sulphur now agitated, attenuated, and made caustic and volatile by the Flame. Thus the unctuous combustible Matter is consumed by the Fire, and the ponderous Acid dissipated, which soon after condenses by its own Weight, when it gets clear of the Flame that throws it off. And hence this Vapour becomes mortal, because the violently caustic Acid, thus strongly agitated, comes in Contact with the Nerves, which move the Muscles, that join the Interstices of the cartilaginous Rings of the Larynx, Bronchia, and Vesiculæ of the Lungs, and contracts them spasmodically, so as to stimulate the Lungs into a panting Endeavour to cough, whilst they are entirely contracted, and not suffered to expand by the Weight of the Air; altho' the Breast be dilated with a laborious, but fruitless Endeavour. The same Vapour, shut up with fermentable Liquors, stops Fermentation; and, if strongly repeated, prevents Putrefaction in all Bodies that otherwise easily putrefy. Hence this Fume is a proper Preservative against pestilential Poison, and the Contagion that flies abroad, or remains fixed in Goods, so as to infect them. And hence we understand, why the Flame of Nitre and Sulphur together, but principally of Gun-powder, afford a very healthy Fume in the Height of the Plague; for the explosive acid Vapour of Nitre and Sulphur corrects the Air; and the same Vapour, if received in a small close pent up Place, kills Insects. This Spirit of Sulphur, called by the Name of *Oleum Sulphuris per Campanam*, is no other than the Oil of Vitriol, which was lodged in the vitriolic Pyrites; and afterwards joining with the Oil of Coals, constitutes Sulphur. This appears from all kinds of Trials; only Oil of Vitriol is suspected to contain some metallic Impression, which is want-

ing in the Spirit of Sulphur. The great *Homborg* has, with much Labour and Subtlety, computed the Quantity of this Acid contained in Sulphur, and found it to be nearly a tenth Part. This Spirit of Sulphur, being purified, barely by standing, then mixed with Juleps, gives them an agreeable Acidity, and renders them a wholesome Drink in all Inflammations, and hot Diseases, attended with Thirst and Corruption. *Helmont* says, it is conducive to the Prolongation of Life. Medicines acidulated with this Spirit of Sulphur, are of good Effect in *Aphthæ*.

Aqua sulphurata.

Sulphurated Water.

Take of Water, a Quart; of Sulphur, half a Pound. Let some Portion of the Sulphur, set on fire in an Iron Ladle, be suspended over the Water in a close Vessel, and let this be repeated, as often as the Fumes from the last Sulphur subside, till the whole is burnt away. *L.*

This was before called *Gas Sulphuris*, and is only Water impregnated with the Acid of Sulphur.

Another Method of preparing the *Gas Sulphuris*.

Moisten some Woollen Cloths in a strong Solution of fix'd alkaline Salt; hang these over the Fumes of burning Sulphur, till they grow dry and stiff: Steep them a-fresh in the Ley, and repeat the Operation, till the Cloths are loaded with Salt. On this Salt, placed in a Retort, pour some Water acidulated with Oil of Vitriol; distil in Sand according to Art.

Hepar Sulphuris.

Liver of Sulphur.

Take of the Flowers of Sulphur, four Ounces; and of Salt of Tartar, an Ounce

Ounce and a half ; grind the Salt, and mix the Flowers well therewith ; then melt them together in a little earthen Dish, under a Chimney, continually stirring the Mass with a Spatula, till it becomes red, taking due Care to prevent its Firing. *E.*

If this Liver of Sulphur is put whilst very hot and dry into a dry Glass Vessel, and pure Spirit of Wine is poured upon it, so as to rise about five Fingers above it, a rich Gold-colour'd Tincture is immediately form'd, which by shaking becomes richer ; and if this is pour'd off, and more Spirit is added, it will afford more Tincture.

This Tincture of Sulphur affords a wonderful warming Medicine, that causes Eruetation, resists Acids, and cuts Phlegm ; a few Drops of it being taken upon an empty Stomach, in Mead, *Spanish Wine*, or any proper Syrup. But *Boerhaave* says, that he could never discover its antipthithical Virtue, as a last Refuge in ulcerated Lungs, tho' he diligently sought for it ; notwithstanding the great Doctor *Willis* has wonderfully recommended it in this Distemper.

Lac Sulphuris.

Milk of Sulphur.

Take of the Liver of Sulphur powder'd, a sufficient Quantity ; Spring Water, four times as much. Boil for three Hours, adding Water if it should be necessary. Let the Liquor whilst hot be filter'd ; and then drop into it a sufficient Quantity of Spirit of Vitriol, till the Effervescence ceases. Let the Powder precipitated be wash'd with Water, and dry'd.

In making the Liver of Sulphur, the Body of the Sulphur is open'd by the fix'd Alkali, and render'd soluble in Water. And being thus precipitated, it suits the delicate,

better than the crude Sulphur. But I don't know that it is a better Medicine.

Sulphur Præcipitatum.

Precipitated Sulphur.

Boil Flowers of Sulphur, with thrice their Weight of Quick Lime, till the Sulphur is dissolved, and filtre the Solution thro' Paper ; then with weak Spirit of Vitriol make a Precipitation, which is to be often wash'd, till it becomes quite insipid. *L.*

This is another Way of preparing the *Lac Sulphuris* ; but by no means preferable to the preceding.

Balsamum Sulphuris simplex.

The simple Balsam of Sulphur.

Boil Flowers of Sulphur in four times their Weight of Olive Oil, in a Pot lightly covered, till the Oil and Sulphur are joined into the Consistence of a Balsam.

In the same Manner is a Balsam of Sulphur also prepared with *Barbadoes Tar*. *L.*

This is the famous Balsam of Sulphur of *Helmont*, *Rulandus*, and *Boyle*, who very highly commend it for healing, mollifying, and resolving, when used externally ; and internally, against Putrefactions, and Suppurations of the Kidnies and Lungs especially, declaring they have thus found a secret, but sufficient Remedy for Consumptions of the Lungs: But *Boerhaave* thinks, that by its acrimonious, indigestible, and hot unctuous Part, it offends the weak Lungs, the Stomach and Viscera of languid Persons, spoils the Appetite, increases Thirst, and parches the Body, already too much dried by the Distemper. And this, he says, he speaks upon Experience and Consideration ; and therefore advises it to be sparingly and cautiously

tiously used; with a careful Observation of the Effect: Certainly, it is not without a burning Rancidness. It has been found, when externally used, successful in curing pale, cold, watery, mucous, sanious, running Ulcers: Perhaps, it was hence somewhat too hastily concluded to have the same Effects when used internally; for thus it raises and continues a Fever.

Balsamum Sulphuris Terebinthinatum.

Balsam of Sulphur, with Oil of Turpentine.

Take of the Flowers of Sulphur, two Ounces; of Oil of Turpentine, ten Ounces; and digest them together for some Hours in a circulating Vessel, placed in a Sand Heat, till the Oil appears of a red Colour, then suffering the Vessel to cool, separate the Balsam from the Sulphur that remains undissolved. *E.*

This Balsam is an extemporaneous anodyne Remedy in Pains of the Nerves, and an excellent Medicine in sanious, sinuous, weeping, watery, and fistulous Ulcers. Internally taken, it is heating, diuretic, and sudorific. It is recommended for cleansing and healing internal Ulcers; it is hence too highly commended for the Phthific, Ulcers of the Kidnies, and for expelling and dissolving of the Stone; But the cautious Physician will recommend only the gentle Medicines, and be afraid of those that operate violently. It is certain, that the Urine is soon impregnated with a Violet Smell, upon taking a little of this Balsam. This is called the terebinthinated Balsam of Sulphur; and, as other distilled Oils may be thus mixed with Sulphur, the Balsams, so prepared, receive their Names from the distilled Oil employed, that gives them their prevailing Odour. Hence the *Balsa-*

mum Sulphuris Anisatum, Succinatum, Juniperinum, &c.

Sal volatile, Spiritus, & Oleum Succini.

Volatile Salt, Spirit, and Oil of Amber.

Take of bruised white Amber, one Part; of clean Sand, three Parts; mix and put them into a coated Glass Retort, whereof they may possess one half; then having fitted it with a large Receiver, distil in a Sand Heat by Degrees of Fire, with the first of which will come over a Spirit, and a little yellow Oil; with the second a yellow Oil and a little Salt, and with the third more Salt and a reddish Oil. Pour the Liquor out of the Receiver, and gather the Salt from the Sides of the Vessel; then press it between the Folds of Cap Paper, let it dry; afterwards by the Filtre separate the Oil from the filtrated Spirit, and rectify it by distilling it with muriatic Sea Salt. *E.*

Sal Succini rectificatum.

Rectify'd Salt of Amber.

Take any Quantity of the former distilled Salt of Amber, with twice its own Weight of decrepitated Sea Salt; powder and put them into a high large Glass Cucurbit, then having fitted it with a blind Head, sublime in *Balneo Arenæ*, but take Care the Oil does not ascend. When the Vessel grows cold, brush off the Salt with a Feather. *E.*

In the *London Dispensatory* we are directed to distil the Oil again, which will then part with a thinner Oil that will ascend, and a thicker Part will remain, called the Balsam of Amber, and we are told, that

The Salt is to be boiled either in the Spirit or Water, and set by to shoot a

shoot; thus it will be freed from its Oil, and the oftener this Process is repeated, the purer will the Salt be. *L.*

The Oils being purified by a repeated Distillation, have a sharp, balsamic, exciting, diaphoretic, diuretic, emmenagogic, and hysteric Virtue; and, when externally used, in the Way of Liniment, are very

serviceable in restoring contracted, weak, paralytic, torpid Limbs: The volatile Salt is gratefully acid, balsamic, unctuous, penetrating, preservative, and stimulating to the Nerves and Spirits, being a true volatile, acid, oily Salt; and therefore a capital Antihysteric and Diuretic, especially if purified by a second Distillation.

CHAP. V.

PREPARATION of METALS.

Causicum Lunare.

The Lunar Caustic.

Dissolve pure Silver by a Sand Heat, in about twice its Weight of *Aqua fortis*; then dry away the Humidity with a gentle Fire, afterwards melt it in a Crucible, that it may be poured into proper Moulds, carefully avoiding over much Heat, lest the Matter should grow too thick. *L.*

This is a most powerful Caustery, and by a bare Touch instantly burns the Parts of a live Body to an Eschar, under which Nature raises an Inflammation that separates the crude Eschar, and leaves the Part pure; so that by repeated Touches with this Matter, all superficial, foul, fungous Ulcers and Cancers are excellently cured. Hence skilful Surgeons highly extol the Virtue of this Stone; and Physicians also learn the wonderful Power of an Acid, when collected and fixed. If given internally in this Form, it is an immediate corrosive Poison, and therefore is never to be used in this Manner.

Calx Jovis.

Calx of Tin.

Take any Quantity of Tin, melt it in an unglazed earthen Vessel, and keep it continually stirring with an Iron Spatula, till it turns to a Calx. *E.*

Stannum Pulveratum.

Powder'd Tin.

Let melted Tin be poured into a wooden Box chalked within, and while the Tin grows cold, let the Box be briskly shaken, and Part of the Tin will be reduced to Powder. The Remainder, by being treated in the same Manner, may also be reduced to Powder, *L.*

These Preparations of Tin are esteemed excellent for Worms and Acidities in the Intestines, and Epilepsies, and Convulsions thence arising.

Sal Jovis.

Salt of Tin.

Take any Quantity of the Calx
of

of Tin, and as much *Aqua Regia* diluted with eight times its own Weight of Spring Water as will float some Inches above it; then make a slow Solution in a Sand-Heat; filtre the Liquor, and evaporate it to a Pellicle; then set it in a cold Place for three or four Days, till it shoots into Crystals, which are to be dried when the Liquor is poured away from them.

Separate the Calx remaining after the Solution; and by mixing it with the Liquor poured off from the Crystals, new Crystals will be thereby obtained. *E.*

This is esteemed an excellent Medicine against Epilepsies and Convulsions; and is very effectual in Case of Worms.

Amalgama Jovis.

Amalgama of Tin.

Take any Quantity of Tin, and melt it in a Crucible; and into another Crucible put an equal Weight of Quicksilver, and permit it to remain in the Fire till the Quicksilver begins to fume; then immediately pour it upon the melted Tin, and stir the Mass with an Iron Spatula till it grows cold. *E.*

Aurum Mosaicum.

Take of the Amalgama of Tin six Ounces, of Sal Ammoniac, and Flowers of Sulphur, each three Ounces; grind and mix them well together in a Marble Mortar, then put them into a Cucurbit, and leisurely raise your Fire thro' all the Degrees; at length breaking the Vessel, at the Bottom thereof you will find the *Aurum Mosaicum* free from the Scoria, which is sublimed. *E.*

In the *London Dispensatory*, the Proportion of the Ingredients is diffe-

rent. The Directions for making it stand thus under the Title of,

Aurum Musivum.

Mosaic Gold.

Take of Tin one Pound, of Flowers of Sulphur seven Ounces, Sal Ammoniac, purified Quicksilver, of each half a Pound. Add the Quicksilver to the Tin melted; when the Mixture is cold, reduce it to Powder; mix well with it the Sulphur and Sal Ammoniac, and sublime the Compound in a Matras. The Mosaic Gold will be found under the Part sublimed, with a small Quantity of Foulness at the Bottom. *L.*

Its Operation is sudorific: It is said to be good in all chronical and nervous Cases, and particularly in Convulsions of young Children. And indeed it seems to be a very good Medicine, if duly prepared and exhibited.

Cerussa.

White Lead.

Take any Quantity of very thin Plates of Lead, and suspend them in an earthen Vessel, at the Bottom whereof is lodged a sufficient Quantity of Vinegar, so as the Fumes arising from the Liquor may surround the Plates; then digest in Horse-dung for three Weeks; during which, if the Plates be not entirely calcined, scrape off the white Powder, and again expose them to the Fumes of Vinegar, till they wholly turn into Powder. *E.*

The Ceruse, thus prepared, is compounded of the Acid of Vinegar, and the dissolved Body of the Lead. This Ceruse is of Use in watery, ulcerous, running Sores, or Diseases of the Skin, being sprinkled thereon. If this fine Powder be drawn along with

with the Breath into the Lungs, it causes a violent, and almost incurable or mortal Asthma. If received into the Mouth, and swallowed along with the Spittle, it occasions inveterate Distempers in the *Viscera*, intolerable Faintings, Weaknesses, Pains, Obstructions, and, at last, Death itself. These terrible Effects are daily seen among those who do any Work in Lead, but principally among the Makers of white Lead. Let all, therefore, beware of this Poison, which being both without Smell and Taste, proves the more pernicious, as it is the less discovered, and does not shew itself till it has destroyed the Body.

Minium.

Red Lead.

Take any Quantity of Lead; melt it in an unglazed earthen Vessel, and keep it stirring with an Iron Spatula till it changes, first into a blackish Powder, then into a yellow, and lastly into an exceeding red one, which is called *Red Lead*; but if it be urged with a still stronger Fire, it will vitrify. *E.*

The Medicinal Virtues of this are not different from those of *Cerusi*.

Saccharum Saturni.

Sugar of Lead.

Take any Quantity, either of white Lead, red Lead, or Litharge reduced to Powder; put it into a Cucurbit, and pour thereon as much distill'd Vinegar as will float four Inches above it; digest for some Days in a Sand Heat, till the Vinegar becomes sweet, which is then to be separated, or poured off clear, after it is subsided, and new is to be put on, till it shall be found to have no Sweetness at all; then let all the Liquors first clarified by Standing be evaporated in a glass

Vessel to the Consistence of Honey, so as that in a cold Place they may shoot into Crystals, which are to be dried in the Shade. Exhale away the Remainder also to a Pellicle, and set it in a cold Place that it may shoot; and repeat the Evaporation till no more Crystals appear. *E.*

It is astringent, styptic, and presently coagulates the Blood: Being dissolved in Water, it affords the Vinegar of Litharge, good against Inflammations, when externally used. Internally, it is recommended for a safe Remedy against Spitting of Blood, Bleeding at the Nose, making bloody Urine, the *Gonorrhœa*, the *Fluor Albus*, and the like; as also for a mollifying Remedy against the Acrimony of the Blood. *Boerhaave* says, he never durst make Trial of it, because he never saw it successfully used by others; and because there is scarce a more deceitful and destructive Poison than this Lead, which presently returns to *Cerusi*, as soon as the Acid is absorbed from it, by any thing it may meet with; whence it afterwards proves an exceeding dangerous, and almost incurable Poison to the Body.

Mars solubilis, seu Chalybs Tartarisatus.

Soluble Iron, or Tartarized Steel.

Take of the crude Filings of Iron, and of the Crystals of Tartar, each a like Quantity, and with a sufficient Proportion of Rain-Water, to bring them into a Mass; make it into Balls to be baked in an Oven; grind these Balls to Powder, and again with a requisite Quantity of Water form it into Balls, and bake them in an Oven as before, and repeat the Operation till the Powder become impalpable. *E.*

Mars

Mars Sulphuratus.

Iron prepared with Sulphur.

Take any Quantity of crude Filings of Steel, and twice their Weight of Sulphur reduced to Powder, and with a sufficient Quantity of Spring-Water make them into a Paste, and suffer it to ferment for six Hours; then put it into a Crucible, and deslagrate it, keeping it continually stirring with an Iron Spatula, that it may become a very black Powder; if farther urged with the Fire, it grows red, and is then called

Crocus Martis aperiens.

Opening Saffron of Iron;

Which does not at all differ from *Chalybs præparatus*, gently calcined in a Crucible till it appears of a red Colour. *E.*

Crocus Martis astringens.

Astringent Saffron of Iron.

This is made of *Crocus Martis aperiens*, reverberated a long time in a very vehement Fire. *E.*

Chalybs cum Sulphure præparatus.

Steel prepared with Sulphur.

Touch the Steel heated to a white Heat with a Roll of Brimstone, that the Steel may melt, and drop into Water placed under it; then let it be separated from the Sulphur, which has dropt along with it into the Water, and be reduced into the finest Powder. *L.*

The Virtues of these Preparations may be learn'd from those of the Filings of Iron, from which they differ but very little. The Filings, however, are as good:

Sal Martis.

Salt of Iron.

Take of the strong Spirit or Oil of Vitriol, the Weight of eight

Ounces, of Filings of Iron four Ounce, of Water a Quart; mix them, and when the Ebullition has ceased, set the Mixture some time upon a Sand-Heat; then filtre the Liquor thro' Paper, and evaporate it, that the Salt may crytallize. *L.*

If the Salt of Iron be diluted with a hundred times its Quantity of Water, and drank in the Dose of twelve Ounces, upon an empty Stomach, walking gently after it, it opens and relaxes the Body, purges, proves diuretic, kills and expels Worms, tinges the Excrements black, or forms them to a Matter like Clay, strengthens the Fibres, and thus cures many different Distempers. The like Taste, Odour and Colour, and the like Blackness of the Excrements, have occasioned many to imagine, that the Chalybeate Waters were thus produced by Nature; especially, because these Liquors, when exposed to the Air, deposite a copious yellow Sediment or Oaker: But Dr. Hoffman has prudently corrected this Error, by Means of Experiments, in his noble Work of Mineral Waters. However we must observe, that this Salt of Iron, meeting with alcallescent and putrid Matters, and thus having its acid Solvent drank up thereby, is turned into an astringent, ponderous, sluggish, metallic Calx, that occasions inveterate Obstructions, and therefore proves hurtful in putrid Fevers. And we know, that when Iron Filings are taken in Female Disorders, where the Body is weak, languid, and abounds with Acidity, the Metal thus produces Eructations, as of Garlick and putrid Eggs, on Account of the Acid it meets with; and hence the Heat, before wanting in the Body, is excited, and the Excrements generally turn black; and in this Case, the Powder of Iron-filings proves much more

Chap. vi. Preparations of Metalline Minerals. 815

more serviceable, than when ever so laboriously prepared by Chemistry. Whence Iron is known to prove useful if Acids abound in the Body, but hurtful where the Body is bilious, or hot.

Flores Martis.

Flowers of Iron.

Take of the crude Filings of Iron, of Sal Ammoniac reduced to Powder, each a like Quantity; grind and mix them well together for some Time; set them in a moist Place, and afterwards sublime them in an earthen Cucurbit, with a glass Head; the Spirit of the Sal Ammoniac will rise first, and is to be caught in a Receiver; then white Flowers will ascend, which are to be thrown away as useless; and at length the red Flowers inclining to Yellow, which are to be swept with a Feather out of the Head.

The *Tinctura Martis*, or Tincture of Iron, may be prepared from the *Caput Mortuum*, as also from the Flowers. E.

See the Remarks on the *Ens Veneris*, or *Flores Martiales* above.

These Flowers have the same Vir-

tues as Mr. Boyle commands in the *Ens Veneris*; for they are wonderfully restorative, warming, and opening, containing the open Body of the metallic Sulphur. They have, also, an Anodyne Virtue, and are often somewhat soporiferous. The dry Flowers, being digested with *Alcohol*, afford a copious golden Tincture, both metallic and sulphureous; and the remaining *Caput Mortuum*, after the Sublimation, affords the same with Alcohol.

Chalybis Rubigo præparata.

The Rust of Steel prepared.

Expose Filings of Steel to the Air, and moisten them sometimes with Water or Vinegar, till they are turned into Rust; then rub them in a Mortar; and by pouring on Water, wash off the finest Powder; the Residue, which by moderate Rubbing was not brought to a Powder fine enough to be washed off, is again to be exposed moist to the Air; and, when farther rusted, is to be treated as before. The Powder thus washed off, is to be dried and kept for Use. L.

C H A P. VI.

PREPARATIONS of METALLINE MINERALS.

Argenti Vivi Purificatio.

The Purification of Quicksilver.

Distil the Quicksilver in a Retort, and then wash it well with Water and Salt, or Vinegar.

L.

Mercurii Solutio.

Solution of Quicksilver.

Take of clean Quicksilver, and dou-

ble *Aqua Fortis*, each a like Quantity, and digest them in a Phial placed in a Sand-Heat, so that there may be made a limpid Solution of the Quicksilver. E.

This Solution is violently caustic, so that it can scarce be touched, as burning all Parts of the Body with violent Pain and Heat: Whence it becomes effectual in extirpating Warts. If a small

Small Part of a Drop touches the Skin, it presently turns it purple.

Mercurii Calx.

Calx of Quicksilver.

Take any Quantity of the Solution of Quicksilver, and with a gentle Fire evaporate it to a white and dry Mass. *E.*

Mercurius calcinatus.

Calcined Quicksilver.

Set Quicksilver purified, in a Sand Heat, for several Months in a Glass Vessel with a broad Bottom, and opening to the Air by a small Hole, till it is reduced to a red Powder. *L.*

Thus a red Powder is made, commonly called *Mercurius Præcipitatus per se*. It is much recommended in Venereal Disorders; cutaneous Eruptions of the chronical Kind; Rheumatisms, and many chronical Distempers. The Dose is one or two Grains. But a double Dose of this, with a double Dose of Opium, is said to be the celebrated Pill of *Misaurin*. But I have Reason to think the following Preparation of much greater Effect.

Mercurius animatus solaris.

Animated Solar Mercury.

Take of the genuine Martial Regulus of Antimony, one Part; of pure Silver, two Parts; melt them together, and with a sufficient Quantity of Quicksilver, make an Amalgama, adding a sufficient Quantity of Salt of Tartar and Sal Ammoniac; triturate this Amalgama strongly in a Glass Mortar; pouring upon it, at due Intervals, a sufficient Quantity of Rain Water, which by this means becomes black; continue the Trituration, with frequent Affusions of Rain Water, till all is so effectually washed off, that nothing but the pure Amalgama is left. After this,

the Amalgama is to be put into a Glass Retort, and the Mercury abstracted by a Sand Heat. By this means the pure Silver is left in the Bottom of the Retort; and this Silver, when again mixed with the Regulus of Antimony, is again to be amalgamated by the Addition of the Salts, afterwards depurated by the like Trituration, and last of all distilled. When these Measures are repeated for at least seven or nine times, a much more pure and subtle Mercury is afforded, which not only acts more powerfully upon other Metals, but, also, produces more conspicuous and salutary Effects on the human Body. The Mercury must be exalted in this Manner, in order to render it fit for the Preparation of this celebrated and efficacious Medicine. The Mercury produced by this laborious Preparation is to be afterwards added to pure Gold; to one Part of which, three or four, or, according to others, only two Parts of Mercury, are to be united and joined by the common Method of Amalgamation. After this, the Amalgama is to be put into a Glass Phial, with a flat Bottom, that the Heat may act on a larger Surface. Then the Phial, when the grosser Air is exhausted, left being expanded by the Heat, it should burst the Vessel, is to be hermetically sealed; and in that Species of Furnace called an *Athanor*, exposed to a proper Digestion, for seven, or even nine solar Months successively, gradually proceeding from a fainter to a stronger Degree of Fire. As in this Digestion the whole of the Affair consists, so if it is duly made, the Amalgama will be gradually converted into a reddish Powder; which, during the first Months of the Digestion, is not so corrected, but that it will excite Fluxes or Salivations, especially in tender Constitutions. But by a protracted Digestion it is so perfected,

fect, and divested of all its drastic Qualities; that the fixed Powder produced by it, may be safely exhibited to the Quantity of two, three, or four Grains for a Dose, and thus persisted in for some Days; so that those of the most delicate Constitutions have no Reason to be afraid of having a Salivation, or any Commotions produced by the other Preparations of crude Mercury, excited by it.

The Character which *Frederic Hoffman* gives of this Medicine is, that it has, with uncommon Success, been prescribed for various obstinate Diseases, which would not yield to the Efficacy of other Medicines. It was frequently used by *Crelles*, an eminent and successful Practitioner. The Efficacy, also, of this solar animated Mercury was at *Hall* often happily experienc'd by the celebrated Chymist *Hochgræff*; especially in subduing those Reproaches of Medicine, Quartan Fevers, and the Gout: So that some who laboured long under the former, and one afflicted with it for four Years successively, were, by a few Doses of this Medicine, restored to perfect Health and Ease. But among the gouty Patients, who were by this Medicine quickly cured, we may justly reckon a certain Man, who, being miserably racked with fixed arthritic Pains, and Contractions of his Limbs, was perfectly restored to his former Health, without ever having had a Relapse. The Success of *Cmbeffellias*, in curing the Gout with Mercury thus fixed, may be seen in *Append. ad Miscel. Nat. Curios.* and confirmed by unexceptionable Witnesses, that is, the Persons cured. These Instances sufficiently prove, that the Encomiums bestowed on this Medicine are not groundless and overdone, but supported by Experience: So that there is no manner of Doubt, but that, without any Dread of Danger, this

Medicine is capable of producing such salutary Effects in obstinate Disorders, if really curable, as can neither be obtained by any other Remedies of the Animal or Vegetable Kingdom hitherto known, nor by a mercurial Salivation, which is not only harsh, and attended with violent and often dangerous Commotions, but is also frequently highly tedious. The Use of the solar animated Mercury is preferable to a Salivation, because it may be gratefully exhibited to the most delicate Constitutions in a due Manner, and small Doses, provided it is once or twice a Day taken, and its Use persisted in, according to the Circumstances of the Patient; which may be done in a sufficiently grateful Manner, if the Dose is mixed with Conserve of Roses, or any other agreeable Conserve, without the Use of any other Medicines. But, before the Exhibition of this Preparation, the *Primæ Viæ* must be freed from those *Sordes*, which might prevent the Efficacy of the Medicine, by Abstersgents, whose Efficacy is heightened by a gently stimulating resinous Purgative; since drastic Purgatives, as they are rarely proper, so they are always prejudicial in the Beginning of a Cure. The *Primæ Viæ* may also, according to the Situation of the Patient, be freed from the *Sordes* contained in them, by a Vomit; which, however, is not to be exhibited without the previous Use of saline and inciding Medicines. When this Medicine is taken, after such a previous Preparation of the Body, it is proper to drink after it some warm aqueous Liquor, such as Tea, Coffee, an Infusion of *Paul's Betony*, or a Decoction of *Sarsaparilla* and *China*, heightened by *Sassafras Bark*. These diluting Liquors make the Medicine exert its proper Efficacy, render the Body perspirable, and receive the saline *Sordes*, disengaged by the Force and Energy

of the Medicine, and which, being dispersed in them, may be without any Violence afterwards eliminated from the Body thro' proper Emunctories, especially thro' the Pores of the Skin, provided they are kept sufficiently open by a due Regimen, in which, by proper Cloths, the external Cold is excluded, without inducing an intolerable and troublesome Heat, and the whole Body is preserved in a gentle and moist Warmth; for profuse Sweats are so far from being necessary, or productive of happy Effects, in the Cure of almost all chronical Diseases, that they rather exhaust the Strength, already too much impaired in the Course of a slow Disorder. But if such Sweats are forced, and as it were extorted, as they often are, the greatest Misfortunes, easily productive of Infarctions of the Viscera, are to be dreaded. Let all violent and sudden Commotions, therefore, be avoided, as much as possible; and, as this Medicine is not productive of such Effects, the viscid and peccant Matter will not, by one or two Doses of it, which Quacks affirm of their Medicines, be subdued and eliminated, but must be conquered by the continual and un-interrupted, tho' mild and gentle Action of it. Thus, tho' *Lucas Torzi*, Physician to Pope *Innocent XII*, in his *Praxis Medica*, asserts, that by Mercury thus fixed, exhibited only seven times, he totally removed a *Lues Venerea*, and a Quartan Fever, without being so arrogant as to call his Veracity into Question, I must only say, that I can hardly believe, that in cold Climates, such as are more Northerly, and where, in chronical Disorders, there is such a Viscidity and Redundance of the peccant Humours, the like Effects can be so speedily, and in so few Days produced by this Medicine. Such an happy and salutary Effect will, how-

ever, without any Violence to the Patient, be much accelerated, if, after the repeated Use of the Medicine for some Days, we interpose balsamic and saline, sulphureous Medicines, the most considerable and efficacious of which are the *Elixir Balsamicum*, or the *Spiritus volatilis Oleosus*, and accommodated to the Situation of the Patients: And certainly a moderate Dose of these, daily taken between Meals, and duly persisted in, calmly accelerates the Cure of chronical Disorders; an Effect not to be produced by more violent Means: For, as the languid Digestion is by this means excited, the Chyle, before not sufficiently subdued, and by its Viscidity contaminating the Humours, is corrected, and, as it were, sheathed up in these balsamic Substances. The vital Energy and Turgescence of the Humours before suppressed, and, as it were, suffocated, by their preternatural Lentor, is so animated with fresh Vigour, that the Fumes of the obstinate Disorder are thereby seasonably destroyed, especially if the Efficacy of the Medicine is promoted by a proper Regimen.

Mercurius Præcipitatus albus.

White Precipitate of Mercury.

Take any Quantity of the Solution of Quicksilver, and gradually pour upon it exceeding strong Brine, till all the Quicksilver be precipitated into a very white Powder, which is to be washed with hot Water in the Filtre, till it communicates no more Sharpness thereto; afterwards the Powder is to be dried between folded Paper with a very gentle Heat. E.

Boerhaave says, that the Powder thus prepared, is perhaps the best Remedy hitherto afforded by Mercury, for internal Use. It operates effectually, and with considerable Safety.

Safety. If ground with thrice its Weight of Loaf Sugar, it makes, what may more properly be called a mercurial *Panacea*, than perhaps other laborious Preparations of Mercury; for however Mercury may be treated, its medicinal Virtue principally depends upon a certain Quantity of Acid adhering to its metallic Part. This acid Virtue, if it abound and appear externally in the Mercury, acts with more Violence, but with less Safety: If sparingly added, and more united to the Mercury, it acts more slowly, more mildly, and safely; and this is the Case with our present Precipitate. If the Saccharine Powder above mentioned, be given in the Quantity of nine Grains to a Person fasting, it purges, vomits, gently kills Worms, opens, and cleanses the Vessels concerned in preparing the Chyle, resolves Phlegm, and thus cures many Distempers such as the Gonorrhœa, Itch, Venereal Ulcers, &c. If this Dose be several times repeated daily, it raises a kindly Salivation. If a Dram of this white Precipitate be well mixed with an Ounce of Pomatum, or the Ointment of Roses, it makes an excellent and safe Unguent in cutaneous Disorders, and proper for curing the Itch, Breakings out in the Face, and inveterate Ulcers. If this Powder be put into a Glass, set over the Fire, and kept constantly stirring with a Glass Rod, and thus be long and gently calcined, it becomes so mild, as scarce to purge, vomit, or salivate, and therefore acts very gently when taken internally; and in this Form the Chymists commend it as a Diaphoretic, and Corrective: But thus treated, it is so mild, as to have little curative Virtue.

In the London Dispensatory, another Method of making the *Præcipitatus albus* is directed thus:

Take of Sal Ammoniac, and of corrosive Sublimate, equal Weights; dissolve them together in Water, filtre the Solution thro' Paper, and with a Solution of some alkaline fixt Salt, make a Precipitation, then wash off all Acrimony from the precipitated Powder. *L.*

Mercurius Præcipitatus dulcis.

Dulcify'd Precipitate of Mercury.

Take of corrosive Mercury sublimate, any Quantity; dissolve it in a sufficient Quantity of Spring Water, and drop into the Solution Spirit of Sal Ammoniac so long as any white Powder will precipitate; then wash the Powder in a Filtre, with repeated Affusions of warm Water. *E.*

Mercurius Præcipitatus fuscus, vulgo Wurtzii.

Brown Precipitate of Mercury.

Take any Quantity of the Solution of Quicksilver, and gradually drop into it a due Proportion of Oil of Tartar *per Deliquium*; that is, so much as will put a Stop to the Effervescence, and cause the Powder to fall to the Bottom, and this is also to beedulcorated with Water, like the white Precipitate. *E.*

Mercurius calcinatus, vulgo Præcipitatus ruber.

Red Precipitate of Mercury.

Take any Quantity of the Calx of Quicksilver, gradually reverberate it in a Crucible, and it will first change from white to brown, then to a yellow, and at length upon increasing the Fire become an exceeding red Powder. *E.*

This Precipitate, which goes by the Name of *Vigo's* Precipitate, is sharp and corrosive; occasioning Pain, and producing an Eschar, when exter

nally applied; and hence afterwards it always occasions a thick, white Pus; and thus cleanses the Lips and Bottoms of putrid Ulcers, and disposes them to heal. It is dangerous to give internally, as inflaming the Viscera by its caustic Virtue, and occasioning Anxiety, Pain, Vomiting, Purging, Gripping, and operating also by Urine and Sweat. If given in too large a Dose, which should never exceed three Grains, or if too often repeated, it occasions a Salivation, with all its Symptoms; and thus cures many Distempers, that are not easily curable any other Way. It is more violent and dangerous than the white Precipitate. *Paracelsus* and *Helmont* shew how to mitigate it, by several times distilling *Alcohol* from it; and thus indeed it becomes milder, by losing much of its Acid. But, at the same Time, it requires to be given in a larger Dose. They also corrected it with the same Success, by distilling from it the Water of the Whites of Eggs. Others dissolve it in strong distilled Vinegar by boiling, then strain and purify; and, by several times distilling the Vinegar off, render the Powder more mild: But there seems to be little gained by all this; white Precipitate being already the Thing here required. In short, the acrimonious Acid adhering to the Mercury, causes it to operate in a very small Dose; and the more this Acid is in it, and the more external to the Mercury, the more violently it acts, and *vice versa*. If this Precipitate be put into a thin hollow Glass Dish, set over the Fire, and continually stirred with a Tobacco Pipe, it will change of a deeper Colour; and if long continued thus, it becomes so much the milder, so as at length scarce to act at all. The Chymists frequently mix red Lead with this Precipitate, in order to increase their Profit.

In the *London Dispensatory* this Precipitate is somewhat differently directed, under the Title of

Mercurius corrosivus ruber.

The Mercurial red Corrosive.

Take of Quicksilver purified, and of the Compound *Aqua fortis*, equal Weights; set them together in a Glass with a flat Bottom, upon a Sand Heat, till a Humidity is exhaled, and the dry Mass has acquired a red Colour. *L.*

Mercurius Corallinus.

Coralline Mercury.

Pour upon the mercurial red Corrosive, thrice its Weight of rectify'd Spirit of Wine, and digest them together two or three Days in a gentle Heat, often shaking the Vessel; then set fire to the Spirit, stirring the Powder continually, till the Spirit is quite burnt away. *L.*

See the Remarks on the *Mercurius Calcimatus*. This is generally known by the Name of *Arcanum Corallinum*.

Mercurius Præcipitatus viridis.

Green Precipitate of Mercury.

Take of corrosive Mercury sublimated powder'd, four Ounces; hot Spring Water, a Quart; in which dissolve the Sublimate. Take also, of Filings of Copper, an Ounce and half; of Spirit of Sal Ammoniac, eight Ounces; digest in a Matras, till a high green Tincture is extracted, which, when filter'd, gradually drop into the mercurial Solution; when the Precipitation is finish'd, evaporate in a Sand Heat to Dryness.

Some esteem this much in the Cure of a *Gonorrhæa*, but I dont know that it excels the other Precipitates.

Mer-

Mercurius Emeticus flavus, vel Turpethum Minerale.

The yellow Mercurial Emetic; or Turpeth Mineral.

Pour upon purify'd Quicksilver in a Glass Vessel, double its Weight of the strong Spirit of Vitriol. Let the Liquor heat gradually, and then boil, till in the Bottom of the Glass there remains a white Mass, which is to be perfectly dried with a strong Heat; this upon the Affusion of warm Water will turn yellow, and fall into Powder. Rub this Powder and warm Water diligently together in a glass Mortar; when the Powder is subsided, pour off this Water, and wash the Powder often with fresh Water, till it becomes perfectly free of all Acrimony. *L.*

This Medicine is generally known by the Name of Turpeth Mineral, or the yellow Precipitate of Mercury. It is certainly a Medicine of very great Consequence in Practice; for which Reason I shall give the Remarks of *Boerhaave* thereon.

This seems, says he, to be the Powder, with which, when rightly prepared, *Paracelsus* performed Wonders; as appears from his little Hospital Surgeon: And this is sufficiently attested by *Oporinus*, who declares he has frequently been employed in making it. It may be rendered milder by burning Spirit of Wine upon it, after the Manner of the ancient Chymists, who by this Means took away from their metalline Calces the Salts, that externally adhering thereto, render'd them too sharp, so that only the Salts intimately united, might remain behind. The prudent *Sydenham*, who is a cautious and sparing Commender of the Chymists, gratefully acknowledges, that by means of this Medicine, Diseases, otherwise incurable, might be cured. *Mr. Boyle* relates, that by a small Dose hereof, used as a Sternutatory,

the whole Body has been changed; and even Cataracts cured. A Woman at *Paris* is also said to have herewith cured Persons given over. Hence it seems an extraordinary Medicine in stubborn and obstinate Cases; but it requires a skilful Physician, and should not be used when milder Remedies may suffice. It is serviceable in the Dropsy, as well as in the venereal Disease; and also in the most obstinate Diseases of the Glands. *Helmont* says, that Oil of Vitriol is here converted into Alum, barely by the Contact of Mercury; but this is either speaking improperly, or not justly: But when that excellent Author directs the Fire of the Vitriol of Copper to be poured upon *Vigo's* Powder, and thence distilled, for preparing the secret Cathartic of *Paracelsus*, if I understand him right, says *Boerhaave*, it makes this Medicine. For if the Fire of the Vitriol of Copper be the strongest Oil of Vitriol, as soon as this is poured upon red Precipitate, it immediately renders the Spirit of Nitre volatile, causes it to fly off from the fixed Mercury, and soon after, supplying its Place, produces the Calx of Mercury as above. If the Water of White of Eggs be several times distilled from it, this takes away the Acid externally adhering thereto, and renders the Powder milder; tho' it will still operate sufficiently. Metals alone have little Effect upon the Body, except by their Bulk, Figure, and Weight; but by the Addition of Salts, especially the acid Kind, they acquire new Properties, often strange ones, and very different, according as the Acids are more fixed therein, or adhere more externally. In the Form of Vitriol they act very violently; but if calcined in this Form, the Calx grows gradually milder, and by a long continued strong Calcination, which drives out the Acids, they become mild, tho' before ex-

ceedingly sharp, as we see happens in Turbith: And thus their Operation becomes milder, and, at the same Time, proportionably less effectual. Those Chymists and Physicians therefore are mistaken, who, having found that this Turbith performed extraordinary Things, but operated violently, endeavoured to mitigate its Virulence; which indeed, may be easily done, but not so as to have the same Effects when mitigated, as before. The Ways of mitigating the Acrimony, are by taking away the Acid by washing the Preparation with Water; by frequently distilling pure Water upon it to Dryness; by pouring Alcohol upon it; by distilling several Parcels of *Alcohol* upon it to Dryness; by grinding it along with more metallic Matter; by the Addition of alkaline Salts, which absorb the Acid; by grinding the Matter with Chalk, Crabs-eyes, testaceous Powders, or the like Absorbers of Acids; by a long continued Calcination; and, lastly, by Fixation with a Fire gradually increased, from a moderate Heat, to the highest the Glass will bear.

Mercurius Sublimatus corrosivus.

Corrosive Mercury Sublimate.

Take of the Calx of Quicksilver, and of decrepitated Sea salt, each a like Quantity; reduce them to Powder, mix them, and put them into a Phial, whereof they may possess near a Half; and in a Sand Furnace, first with a gentle Fire, then gradually increasing it, a white crystalline Mass will sublime to the Top Part of the Glass, and every where adhere thereto, which is afterwards to be separated from the red *Scoria*, and to be purified, if there be Occasion, by repeated Sublimation. *E.*

There are many other Methods of making this Preparation. In the

London Dispensatory it is thus directed, under the Title of

Mercurius corrosivus Sublimatus vel Albus.

Corrosive Mercury Sublimate, or white corrosive Mercury.

Take of purified Quicksilver forty Ounces; of Sea Salt, thirty-three Ounces; of Nitre, twenty-eight Ounces; of calcined green Vitriol forty-six Ounces: Rub the Quicksilver first with about an Ounce or more of corrosive Sublimate in a wooden or stone Vessel, till it breaks into small Grains; then mix it with the Nitre, afterwards with the Sea Salt, till the Quicksilver quite disappears: Lastly, add the calcined Vitriol, but don't rub the Mixture too long with it, lest the Quicksilver should begin to part again. Sublime the Mixture in a Matras, to which may be fitted an Alembic Head, that a Spirit, which will ascend in a small Quantity, may be saved. *L.*

I am inform'd, that the Sublimate generally us'd is imported from *Holland*; and I believe it is certain that a great deal of Arsenic is mix'd with the *Dutch* Sublimate. Hence the Calomel made from it will be very different from that made with genuine Sublimate. The Apothecary, who trusts the Preparation of this to another, is guilty of an inexcusable Neglect. This Preparation is a *Lapis infernalis* of Mercury, and a most violent Corrosive, presently converting all the Parts of the Body it touches, into an Eschar, that soon falls off; whence it consumes obstinate Callosities in Ulcers, as also Warts, and indurated Glands. That eminent Surgeon *Johannes a Viga* was acquainted herewith, and hence composed his Troches of *Minium*, which are an incomparable Remedy for consuming scrophulous Tumours, and

and eradicating them by Suppuration. The Taste of this Vitriol is abominably austere. A Grain of it dissolved in an Ounce of Water, affords an excellent Cosmetic, if cautiously used. It proves poisonous to all cutaneous Insects by bare Lotion. If a Dram of this Solution be softened with Syrup of Violets, and drank twice or thrice a Day, it performs Wonders in many reputed incurable Diseases; but it requires to be cautiously used, by a prudent Physician, and should not be ventured upon, unless the Method of managing it is well known.

Mercurius Sublimatus dulcis.

Sweet Mercury Sublimate.

Take of corrosive Mercury Sublimate, ground in a glass Mortar, four Ounces; and of clean Quicksilver three Ounces; mix them well in the Mortar, till the Globules of Quicksilver disappear, then put the Powder into an oblong Phial, whereof it may possess only one Third, and bury it half Way in a Sand Heat; then with successive Degrees of Fire, nearly the whole Quantity of Mercury will sublime, and stick all around to the upper Part of the Glass, which being broke, and the red Powder about the Bottom, and the White about the Neck cleared away, the white Mercury is again to be three or four Times sublimed.

If the Operation be seven Times repeated, the Preparation is called *Calomel*, or *Aquila alba*. E.

In the London Dispensatory it is thus directed:

Take of corrosive Sublimate one Pound; of purified Quicksilver nine Ounces. Add the Quicksilver to the Sublimate reduced to Powder, and in a glass Mattrafs digest them together, in a gentle Sand Heat, often shaking the

Glass, till they are united. Then augmenting the Heat, sublime the Mixture: After the acrid Part on the Top of the Sublimation is scraped off, and if any Globules of Quick silver chance to appear, they likewise being separated, the Mass sublimed is to be reduced to Powder, and sublimed again; the Sublimation is to be six Times repeated. L.

The College have here drop'd the Distinction betwixt *Mercurius dulcis*, and *Calomel*, as of very little Consequence; because the Chymists have long neglected this Distinction, and sold the same Preparation for both. But if Apothecaries would be at the Trouble of making it themselves, and take proper Care, it would be well to have it thus distinguish'd; for the *Calomel* will operate more mildly than the *Mercurius dulcis*, as I have experienc'd when the Preparations have been began and finish'd under my own Inspection. Sir *Theodore Mayerne* is said to have been the Introducer of this into Practice. The usual Dose is fifteen Grains for Adults, and in Proportion for Children. It is an admirable Remedy for the Worms; but for this Purpose and all others, except raising a Salivation, it must be either mix'd with cathartic Ingredients, or Purges must be given at a short Interval after it. And even with this Precaution, it will be very subject to affect the Mouth, if the Patient takes the least Cold. For the farther Virtues of *Mercurius dulcis*, see the Article of Mercury in the *Materia Medica*.

Panacea Mercurii.

Panacea of Mercury.

Take any Quantity of levigated Calomel, and digest it in a Sand Heat for twenty Days with four Times its own Weight of Spirit of Wine, observing frequently to
H h h 4 shake

shake the containing Vessel; then pour off the Spirit, and dry the Powder. *E.*

I don't know that this Treatment renders the Calomel in any Degree a better Medicine.

Ethiops Mineralis.

Ethiops Mineralis.

Take equal Parts of Quicksilver purified, and of Flowers of Sulphur unwashed; rub them together in a Mortar of Glass or Marble, till the Quicksilver perfectly disappears, and the Union is perfected. *L.*

Great Controversies have arose among Practitioners with Respect to the medicinal Virtues of this Preparation. Some assert that it enters into the Blood, and penetrates so far as to be found adhering to Plaisters laid upon old Ulcers; and that it is an excellent Alterative. But *Boerhaave* says that it is an insipid Powder, not at all sharp, nor easy to be thoroughly mixed with any Thing; and that when given internally, it cannot enter the absorbent Vessels, the Lacteals, or Lymphatics, but passes directly thro' the intestinal Tube; where it may happen to destroy Worms. They are therefore deceived, says he, who expect any other Effects from it; at least, *Boerhaave* himself, as he says, could never find them. He is afraid it is too unwarily given in such large Quantities to Children, and Persons of tender Constitutions, as being a fossil Mass foreign to the Body, and unconquerable by the Nature thereof; and should be the more suspected as it there continues long sluggish and inactive. And affirms that it does not raise a Salivation, because it cannot come into the Blood. When any great Man starts a Notion in Physic, with however little Foundation, the whole Tribe of Imitators who can-

not think for themselves, immediately assent, and treat it as a certain Fact. In the present Case, it is difficult to conceive how two such penetrating Substances as Quicksilver and Sulphur, can by their Union form so inert a Mass as is represented above. And, indeed, Experience informs us, that it is of such good Service in some chronical Distempers, that without getting into the Blood it could not perform. I must confess, however, that it is the most insignificant of all the Mercurials; and perhaps sometimes if taken for a long Time, without the due Interposition of Cathartics, it may lodge in the intestinal Tube, and cause some Inconveniences. There is scarcely a better Remedy for Worms. But for this Purpose Cathartics must be given with it, or interpos'd in the Intervals of taking it.

Ethiops Antimonialis.

Antimonial Ethiops.

First flux equal Parts of Antimony and Sea Salt in a Crucible for an Hour; then let the Matter cool; break the Crucible, and knock off off the Scorix; then rub equal Parts of the Regulus made in this Manner, and Mercury, together, till they are incorporated,

It will cure most chronical Disorders of the Skin, and is admirable in all Sorts of Obstructions. Hence it becomes serviceable in the King's-Evil, and the most obstinate glandular Diseases, and many chronical Distempers, that are out of the Reach of other Medicines. I have seen better Effects from it in cancerous Tumors, than from any other Remedy. In venereal Disorders of a long Standing, I have often been a Witness of such Effects as I have not seen from any other mercurial Medicine whatever. This, like all Antimonials, will contract an emetic Qua-

lity by being exposed to the Air, which is probably owing to the Acid it imbibes. It may be given in the Quantity of a Scruple, or more in some Constitutions, but at first it should be taken in much smaller Quantities gradually increasing the Dose, because otherwise it will in some Constitutions excite a Nausea.

Mercurius Saccharatus.

Sugar'd Mercury.

Take of pure Quicksilver, and brown Sugar-Candy, each half an Ounce; chymical Oil of Juniper, sixteen Drops. Rub them in a glass Mortar, till all the Mercurial Globules entirely disappear. *E.*

Mercurius Alcalisatus.

Alcalis'd Mercury.

Take pure Quicksilver, three Drams; prepar'd Crabs Eyes, five Drams. Rub them in a glass Mortar as in the preceding Preparation. *E.*

These are very good Methods of preparing Mercurial Alteratives, but I think not the best. The Patient must be purg'd at Intervals, otherwise they will salivate.

Cinnabaris Facitia.

Artificial Cinnabar.

Take of purified Quicksilver twenty-five Ounces; of Sulphur seven Ounces; stir the Quicksilver with the Sulphur melted, and if the Mixture takes fire, it is to be extinguished by covering the Vessel; then let the Matter be reduced to Powder, and sublimed. *L.*

The first Part of the Process makes an Æthiops, without the tedious Labour of Trituration, which is as good as that made without Fire, as directed above. Boerhaave says, this Cinnabar is a Mixture of Mercury and Sulphur united by the Fire, in the Form of a simple Fossil; which is found natural in many Mines, and is

like the facitious, without much Difference. It has nearly the same Virtue in the Body, as Æthiops. Crato called it the Magnet of the Epilepsy; but Boerhaave says, he never saw it produce any great Effects. If it be mixed with Purgatives, then, like Æthiops, it is driven quicker thro' the Intestines, with the Success of Æthiops. It is mixed with red Cosmetics in the Form of Pomatum. It is used in Fumigations, against venereal Ulcers in the Nose, Mouth, and Throat, with little, and often with bad Success. The Mercury may be revived very pure from the Cinnabar, by grinding it with twice its Weight of Iron filings, and distilling it in a Retort, with the strongest Heat of a Sand Furnace, into Water.

Crocus Antimonii, vel Metallorum.

Crocus of Antimony.

Take of Antimony and Nitre equal Weights, being separately reduced to Powder; let them be well mixed, and then gradually thrown into a hot Crucible to melt; the Matter being poured out, is to be separated from its Scoria. It will not always appear of the same Colour; it is the more yellow the longer it has been melted. *L.*

This has hitherto been call'd *Crocus Metallorum*, or Sulphur and Nitre make a Kind of Gunpowder with black Antimony, and therefore flash off in the same Manner. The metallic Part calcines to a Glass and a Scoria, both of them violently emetic, and communicating that Virtue to Wine by Infusion; whereas native Antimony is not emetic. It is of little other Use in Medicine, but in making the emetic Wine.

Crocus Antimonii lotus.

Washed Crocus of Antimony.

Boil the Crocus of Antimony reduced

to a very fine Powder in Water, and this Water being poured away, wash the Powder often with hot Water, till the Water comes off insipid. *L.*

This is used in making emetic Tar.

What is usually call'd Liver of Antimony, is made of the same Ingredients, mix'd in the same Proportion. But instead of throwing them gradually into a hot Crucible, they are put into a Mortar, and fir'd, by throwing in a Piece of lighted Charcoal, or hot Iron. This, or the *Crocus Antimonii*, which is nearly the same, are much recommended as a Preservative, or Cure for the Murrain in Cattle; and nothing is so likely to succeed. A late anonymous Author recommends five Drams for an Ox; three for a Cow; and one for a Calf, or Sheep, once in ten Days, as a Preservative. By way of Cure, the Dose, and its Repetitions, must be suited to the Circumstances.

Crocus Metallorum mitior.

The milder Crocus of Metals.

This is prepar'd with one Part of Nitre to two of Antimony, in the same Manner as the *Crocus* of Antimony.

When Antimony is mixed with half its Weight of Nitre, and thrown into a Crucible red-hot, it deflagrates; and if the Fire be rais'd high enough, the Mixture melts, and *Scoriae* separate, as in the other *Crocus*; but if the Heat be not so strong, it does not melt, nor is this Separation made. We are informed in the Narrative of the Committee of the College, that the Gentleman, who propos'd this Medicine to the Committee, prepares it with this lesser Degree of Fire. I am well informed, that a Dose of a few Grains, eight for Example, has an admirable Effect in Fevers, the

Small Pox, and many chronical Distempers, by way of Emetic.

Antimonium Diaphoreticum Nitratum.

Diaphoretic Antimony with Nitre.

Take of Antimony half a Pound, of Nitre a Pound and a half; pulverize them separately; then mix them together, and throw them, by a Spoonful at a time, into an ignited Crucible: After the Detonation, let the white Mass be detained for half an Hour in the Fire, and let the Powder be kept in a glass Vessel stop'd close. *E.*

Boerhaave says, that this being taken in the Quantity of half a Dram, has scarcely any sensible Effect, except that it moderately opens on account of the fixing Nitre adhering thereto; whence it may prove serviceable in acute Cases. In this State, the Chymists call it diaphoretic; and judge, that the arsenical Poison of the Antimony is fixed by a large Proportion of Nitre; but there was nothing emetic in the Antimony before, tho' taken in the Quantity of several Drams crude, or without any Nitre; whereas an equal Proportion of Nitre excites this emetic Virtue. *Basil Valentine*, therefore, and other Chymists, need not to have been so anxious to free this diaphoretic Antimony from its fixing Nitre; for it causes no Anxiety, Nausea, or Vomiting, and only stimulates mildly.

Antimonium Diaphoreticum dulce.

Sweet Diaphoretic Antimony.

Take any Quantity of nitrated diaphoretic Antimony; powder it; then pour on as much Spring Water as will rise above it some Inches; digest for a Night, afterwards pour off the Water, and add fresh, and thus repeat the Ablution five or six times. All the Washings being mixed together, filtrated, and

and evaporated over a gentle Fire to a Pellicle, afford the *Nitrum Stibiatum*, or Stibiated Nitre. *E.*

This is the common diaphoretic Antimony, now called in the *London Dispensatory Calx Antimonii*, or Calx of Antimony. It is a very great Reproach to Physic, that the Virtues of a Medicine so long in Use, and so much in Practice as this, should be so little ascertain'd, that at this time it is asserted, that it is possessed of none at all, by very considerable Authors; whilst others are of a different Opinion. *Boerhaave*, to whose Opinion I pay the utmost Regard, affirms, that it is an indolent, noxious Calx, without any Activity discoverable by Observation; and loses all the Virtue it had before it was washed. And that it only acts sensibly, when mixed in a double Proportion with Purgatives; the Virtues whereof it actually excites, as appears by the *Pulvis Cornachini*. After this Declaration from so great an Author, it is not surprizing, that all those who never think for themselves should assent without farther Enquiry; and that this Medicine should fall into Disgrace. I can't from Experience say much with Respect to its Virtues; but I have sometimes known a profuse Sweat arise upon taking it, which has been attended with more happy Consequences than those excited by the warmer Diaphoretics. *Helvetius* recommends it as excellent in the Small Pox.

Regulus Antimonii.

Regulus of Antimony.

Take of Antimony, Nitre, and crude Tartar, each a like Quantity; reduce them to Powder separately; mix them together, and grind them again; at several times put the Whole into an ignited Crucible; when the Detonation is over, build up a large Fire, so as to make the

Matter flow like Water; then pour it out into a melting Cone first heated, and greased with Tallow, and keep it shaking, that the Regulus may separate and fall to the Bottom: When all is cold, free the Regulus from the *Scoria* at the Top. *E.*

This renders Wine, in which it has been infus'd, Emetic.

Regulus Antimonii Martialis.

Regulus of Antimony with Iron.

Take of Antimony, Nitre, and crude Tartar, each a Pound; of Pieces of Iron half a Pound; make the Iron red-hot in a Crucible, and gradually add the other Ingredients to it, having first ground and mixed them together, and proceed entirely after the same Manner as in making the Regulus of Antimony.

If the Regulus of Antimony with Iron, be thus several times fused with Nitre and Tartar, it will at length become the *Regulus Antimonii Stellatus*, or Starry Regulus of Antimony. *E.*

Regulus Antimonii Medicinalis.

The Medicinal Regulus of Antimony.

Take five Parts of pure Antimony, four Parts of common Salt, and one Part of Salt of Tartar. Some alter the Proportion of the Ingredients, and take eight Parts of Antimony, seven of common Salt, and one of Salt of Tartar; but the first Proportions are most generally adhered to. These Ingredients, when beat and mixed together, are to be successively put into a red-hot Crucible: Let the Action of the Fire be raised to such a Height, that the Matter may be sufficiently and thoroughly fused. Then, after the Matter is sufficiently fused, which

which generally happens in a Quarter of an Hour, let it be poured into a Vessel of a conical Form, besmeared with Tallow, or smoaked with a Candle. This Vessel is to be shaken, that, by this Means, the Regulus may be sufficiently separated from the Scoria, and carried to the Bottom of the Vessel. Some reckon this Circumstance of shaking so much the more necessary, because as this Regulus is lighter than any others prepared from Antimony, it must of Consequence be separated from the Scoria, and fall to the Bottom with more Difficulty. Thus if such a Concussion, or Shaking, should be neglected, and the Mixture poured when boiling, as it were, from the red-hot Crucible into a cold conical Vessel, it frequently happens, that during the Continuation of the Ebullition, a Portion of the Scoria is intermixed with the Regulus; and, *vice versa*, a Portion of the Regulus remains in the Scoria, so that by the Oversight, we do not obtain it so pure or uncontaminated, or at least so beautiful and shining, as it would otherwise be. The Regulus, when separated from the Scoria, resembles polished Steel or Iron; but if either in a Mortar, or upon a Marble, with, or without the Addition of Water, it is reduced to a Powder so fine, that the shining Particles entirely disappear, it assumes a reddish, or rather a purple Colour.

The Efficacy of this *Regulus* is highly extolled in chronical Disorders, and such as arise from long-continued Obstructions of the Viscera: Hence it is much recommended in Dropsies, Epilepsies, Scurvies, and Fevers; for as these Disorders are of a stubborn and obstinate Nature, they require Medicines which do not, like Vegetable Substances, too quickly produce

their Effects, but remain for a considerable Time in the Body; and by often impelling the tenacious Matter, at last entirely break and subdue it. Hence we may easily conceive why this Regulus must be a Medicine of singular Efficacy in surmounting the Obstinacy of chronical Disorders. There are also not a few who highly extol its Efficacy against Fevers. *Maetsius* says, that it is a specific Diaphoretic in Fevers of all sorts. The same Author commends it in all Disorders, where, to use his own Words, *Sweats are wanted, because it does not, like vegetable Substances, inflame the Blood.* *Frederic Hoffman* asserts, that he was informed, by People who were acquainted with this Author when alive, that he made daily Use of this Regulus; and his own *Praxis Chymiatrica* is a concurring and additional Proof, that he did so, for in that Work he maintains, that it is of uncommon Efficacy in all Diseases where the Motion of the Lymph, and insensible Transpiration, are to be promoted. Thus he commends it in the Gout, the Apoplexy, &c. but more particularly in Fevers. This he has also done in *Act. Curios. Lugd.* where he orders it to be used with a diaphoretic Regimen. *Barkhyfen* agrees with *Maetsius*, and highly extols its sudorific Virtues in Fevers, and cutaneous Disorders. *Koenig* declares himself of the same Sentiments in his *Regnum Minerale*. This Medicine is also commended by some in Cases where the State of the Lymph is bad, in Dropsies, Anasarca, &c. but particularly with Regard to its Use in an Anasarca. *Hoffman* says, that the learned and judicious *Hennike* mixed it with *Mercurius Dulcis*, and used it under that Form with uncommon Success. *Frederic Hoffman* orders it to be prescribed in small Doses, with the Bezoardic Powders, in the first Stages of malignant Fevers, Small

Pox, and Dysenteries. Because, says he, by its Means a gentle Diaphoresis is brought on, and the Mucus of the *Primæ Viæ* being attenuated, the Heaviness and Uneasiness of the Præcordia are removed. And he adds, that when malignant Fevers raged pretty much in his own Country, that excellent Chymist *Rollwagius* often used this Regulus with the greatest Success; of it, together with some earthy Absorbents, he composed an alexipharmic Powder, which is in constant Use at this very Time. He farther says, that the Regulus was used by the above-mentioned Dr. *Hennike* in these Disorders. *Maestius* commends the Lixivium of its Scorix apply'd externally as a proper Medicine for the Itch; and *Hoffman* says, that, by his Father's Advice, not only himself, but a great many others, labouring under this Disorder, used this Medicine with incredible Success; and that he remembers to have seen the Regulus itself, mixt with earthy Substances, used in the Itch; and has known it in that Form, and in Conjunction with a sudorific Regimen, to remove oedematous Swellings, especially of the Feet. Hence we may plainly perceive the Efficacy of this Regulus, in augmenting the Motions of the Humours.

Its Dose is from six Grains to one Scruple, and upwards, as the State of the Patient shall require. But before this Regulus is used, it must be so thoroughly triturated, and, upon a Marble, reduced to a Powder so fine, that none of the shining Particles may in the least appear: For this Reduction of it to so fine a Powder is absolutely requisite, both to its easy Solution, and its speedy Operation; and if this Caution should not be observed, it remains too long in the Intestines, and may possibly give Rise to troublesome Symptoms.

Vitrum Antimonii.

Glass of Antimony.

Put two Pounds of powdered Antimony into a large and unglazed earthen Dish, with a flat Bottom; set it over a Fire in the Air, so that the Powder may fume, but not melt; in which Management the whole Art consists. Keep the Powder constantly stirring with an Iron Rod; there flies off a thick white fetid Fume, pernicious to the Lungs, and therefore to be avoided by the Operator, standing with his Back to the Wind. Continue the Calcination uniformly, till the Matter ceases to fume; then increase the Fire a little, and if the Matter again begins to fume, continue stirring it till it leaves off. Again increase the Fire, till at length the Dish begins to grow red, whilst the Matter emits no more Fume: The Calx will be of a greyish Colour; but if the Calcination be longer continued with a stronger Fire, so as to ignite the Matter, the Calx will be yellow, and better purified from its volatile Parts. If the Fire should be strong at the first, so as to melt the Antimony, and make it lumpy, the Lumps are directly to be broke to Powder, and the Fire to be diminished. Put this Calx into a Crucible, and apply Fire round it, first at some Distance, gradually approaching it nearer, and at length bringing it quite close, so that the Crucible being exactly covered to prevent the Coals and Ashes from falling in, may be thus uniformly heated and ignited. Increase the Fire till the Calx melts; keep it fused for half a Quarter of an Hour; then pour it out upon a dry and hot Marble. It will be a dusky, yellowish, brittle, somewhat transparent, and livid Cake, called

called the Glass of Antimony: It will appear the more transparent, the longer it was fused in the Fire.

This Glass of Antimony is almost mortally emetic; and when infused in Wine, that is not considerably acid, it renders the Liquor also emetic, without any great Loss of its Substance; tho' this Virtue is soon exhausted, by often repeating the Infusion.

Vitrum Antimonii Ceratum.

Take Glass of Antimony in Powder one Ounce; Bees Wax one Dram: Melt the Wax in an Iron Ladle, then add the Powder; set them on a slow Fire without Flame for the Space of half an Hour, continually stirring them with a Spatula; then take it from the Fire; pour it upon a Piece of clean white Paper, powder it, and keep it for Use. E.

The *Edinburgh Medical Essays* have the Honour of having published this Preparation; a Remedy of so much Consequence in obstinate Diarrhæas and Dysenteries, that I think it exceeds all other Medicines in Efficacy for those Distempers. I shall therefore give the Directions with Respect to its Uses, as I find them particularised by the Publisher in the above-quoted Essays.

The ordinary Dose for an Adult, is ten or twelve Grains; but for the greater Safety, I commonly began, says he, with six; to a strong Man I have given a Scruple, which sometimes worked so mildly, that I have thought it too weak. To weakly Constitutions I give five or six Grains, increasing the Dose afterwards, according to the Operation. To a Boy of ten Years of Age, give three or four Grains. To a Child of three or four Years, two or three. This

Medicine has been practised with Success for the Dysentery, and the Preparation was kept a Secret for many Years. When first it was communicated to me, says he, I thought it so harsh and dangerous a Medicine, that I had no Courage to try it for some Years; and even then began the Dose with one Grain, and increased it gradually to twenty, which was the largest Dose I ever gave. As soon as I was convinced by a Number of Experiments, that it was both mild and efficacious in curing the Dysentery, I published the Receipt in our *Edinburgh News-Papers*, being under no Promise of Secrecy with Regard to this. I do not, says he, expect that any Physician will incline to give a full Dose at first, without better Authority than I can give to Strangers; but the Cautious may give as small a Dose as they please, and make Trials almost in any Disease, where Purgatives will do no Harm; and increase it gradually as they find it operate. He farther tells us, he gave it in Dysenteries, with or without a Fever, whether epidemic or not. He tried it often where Bleeding and Vomiting had been premised, and where they had not, with very good Success. He never chose to give Opiates in the Beginning, especially where there was a great Sickness; because altho' Opiates give great Relief to some, yet at other times he thought both the Sickness and Purging thereby increased the following Day. He never began with a larger Dose than ten Grains, because it frequently operates as violently at first, as twenty Grains at last, even upon the same Patient. In its Operation, it sometimes makes the Patient sick, and vomit; it purges almost every Person; but he has known it cure without any sensible Evacuation or Sickness; and in violent Dysenteries, they purge seldom with than without it. If it purge suffi

ently, or fatigue the Patient any way, then intermit a Day or two betwixt each Dose, as with other Purgatives. As some have been cured with one Dose, to others he has been obliged to give five or six, especially when the first Doses have been too mild; and has often thought, a weak Dose did no good in chronic Cases. After the second or third Dose, the Stools are seldom bloody, the Gripes and Sickneſs are much abated, and the mucous Stools are less viscid. Give it on an empty Stomach; for then it operates most mildly. Forbid Drinking any thing after it for three Hours, unless the Patient is very sick, or disposed to vomit; in which Case, give warm Water, as in other Vomits. Beware of giving it for a Diarrhæa in the End of a Consumption. Some Diarrhæas have been cured of long Standing, with large Doses of it; but it has failed oftener here than in Dysenteries. He forbids the Use of all fermented Liquors; and recommends a Milk-Diet, with Rice, or Bread, Chicken-broth, or Water-gruel. Nothing cold should be given, unless it be a Tea Spoonful of Jelly of Hartshorn, as often as the Patients please; and sometimes indulge them with a little Jelly of Currans to refresh their Tongue. It may be given safely to Women with Child; and to Children on the Breast you may give half a Grain.

Experience has abundantly confirmed to me the Virtues of this Remedy, as represented in the preceding Remarks. And I am inform'd, that crude Antimony mix'd with melted Wax, instead of the Glass of Antimony, will have very good Effects in curing a Diarrhæa and Dysentery. The last I have only once experienced, and then not till after the cerated Glass had been taken; but I had Reason to think it attended with very salutary Consequences.

Sulphur Auratum Antimonii.

Golden Sulphur of Antimony.

Take any Quantity of the Scorion of Regulus of Antimony; grind them to Powder whilst they are hot, and boil them for a considerable Time in thrice their Weight of Spring Water; filter the Solution (which appears of a Colour between a Yellow and a Red) thro' Cap-paper, then by dropping into it a due Proportion of Spirit of Vitriol, the Powder will precipitate, which is to be washed with Water, so as to edulcorate and free it from its ill Scent. E.

In the London Dispensatory this Medicine is called *Sulphur Antimonii precipitatum*; and the Precipitation is directed to be made with Spirit of Sea-Salt. It is Cathartic and Emetic; and the Dose is said to be from one to eight Grains.

Æthiops Medicinalis Plummerii.

Plummer's Medicinal Æthiops.

Take of Calomel, and the Golden Sulphur of Antimony, each two Drams; reduce the Calomel to a gross Powder, and then levigate it upon a Marble, adding gradually the Sulphur of Antimony; and by long Trituration rub the Whole into a fine Powder.

This has been found by Experience to be an excellent Remedy in all cutaneous Distempers, the Leprosy not excepted; in venereal Disorders, and many glandular and obliquate Distempers. The Dose is seven or eight Grains twice a-day. An Æthiops of not inferior Virtues may be made, by rubbing crude Mercury with the Sulphur of Antimony, till the Mercurial Globules disappear.

Butyrum Antimonii.

Butter of Antimony.

Grind two Pounds of corrosive Mercury

cury sublimate to fine Powder, in a warm and dry Glass Mortar, with a Glass Pestle; grind also separately a Pound of the best Antimony perfectly fine; mix the two together in the Glass Mortar; they will thus grow warm; and let the Vapour be carefully avoided; have at Hand a dry Glass Retort, capable of holding three or four times this Quantity of Matter, with its Neck cut off, so as to leave a wide Mouth. Put the Powder, whilst thoroughly dry, into this heated and dry Retort, so that no Blackness may stick internally to the short Neck; put the Retort into a Sand-Furnace fit for the Purpose, so as almost to touch the Bottom of the Iron Pot, the Neck of the Retort inclining a little downwards; apply a Glass Receiver, with the Neck cut off, so as exactly to receive the Retort. Cover the Retort with Sand, and let the Operation be performed under a Chimney that entirely carries up the Fumes. The Retort being now warmed by a very gentle Fire, and luted on with a Mixture of Lime and Clay, raise the Fire cautiously by Degrees; the Retort will first appear cloudy, and a little Liquor come into the Receiver: Keep up this Degree till no more Liquor comes over; then increase the Fire gradually, and carefully, till an unctuous Matter rises into the Neck of the Retort, distils into the Receiver, and coagulates in falling. Continue this Degree of Fire, and a white icy Matter will concrete, and remain in the Neck of the Retort; on both Sides of which place live Coals at a Distance, and approach them nearer by Degrees, that the Neck of the Retort may become as hot as the Belly; the Matter will thus be melted, and run down

into the Receiver. Continue carefully with this Degree of Fire, and afterwards increase it a little, till no more Butter rises, and all of it be melted down into the Receiver, which is now to be removed with great Care, to prevent any of the Vapour coming to the Lungs. Immediately stop the Receiver, and set it by; apply another, fitted in the same Manner for the Purpose; lute it on, increase the Fire, and a yellow, red, blackish, variously coloured Mass will arise; then increase the Fire to the utmost, at last raising a Fire of Suppression, till the Sand almost grows red-hot; and leave it thus for two Hours. Let all cool; take off the Receiver, wherein some Quantity of of running Mercury will be found, and an impure Butter from the sulphureous Fumes of the Sulphur of the Antimony. In the Neck of the Retort will also appear a Matter of various Colours, consisting of the Mercury, Sulphur, and Butter, compounded together; and at the Bottom of the Retort, when broke, appear Antimonial *Fæces*: In the Beginning of the Neck is a compact, hard, opaque, highly ponderous Mass, which shines on the Surface contiguous to the Glass, but is rough on the other: This being ground to Powder is the true Cinnabar of Antimony, and a thing of Value. Great Patience and Care are required in this Process; because if the Vessels or Luting crack, or the Fumes any other way escape, and are received into the Lungs, they are poisonous, on Account of their caustic Property.

The Butter of Antimony is to be rectify'd in a Glass Retort, till it appears of a very white Colour; taking great Care to avoid the Fumes, which may prove fatal. This Butter of Antimony

imony is a most immediate Caustic, causing an Eschar the quickest of any thing known, and which generally separates the same Day it was formed. I chose to give this Preparation from *Boerhaave*, as being more circumstantial than it is delivered either in the *Edinburgh* or *London* Dispensatories; a Circumstance which ought to be regarded in a Process attended with much Danger.

Cinnabaris Antimonii.

Cinnabar of Antimony.

Take of crude Mercury fifteen Ounces, of common Sulphur five Ounces, Antimony crude one Ounce and an half; mix them well together, and sublime them in a luted Bolt-head in a naked Fire: Let the Fire be strong enough to make the Bolt-head red-hot.

In the Process for making Butter of Antimony, another Method of making Cinnabar of Antimony is taken Notice of. And the *London* Dispensatory orders what remains after the Distillation of Butter of Antimony, to be sublim'd in a coated Retort, in order to make this Cinnabar. Much the same Virtues are ascribed to this as to the native Cinnabar. The usual Dose is a Scruple, but it may be given in larger Quantities.

Mercurius Vitæ.

Into a Glass of fair Water let fall a Drop of the rectified Oil of Antimony; the Moment it falls it becomes white, turns to Powder, and sinks to the Bottom of the Vessel. Continue to drop in more, till a fourth Part of the Oil be used in Respect to the Water; it instantly sinks to the Bottom, in Form of an exceeding white, ponderous Powder. Stir all with a Glass Rod; let them rest; a limpid acid Liquor will float above, which is gently to be decanted; perfectly edulcorate the Powder,

by washing it in several fresh Waters, till it is entirely insipid: Dry it with a gentle Fire, and thus there will be obtained a white, insipid, ponderous Powder, called *Mercurius Vitæ*.

This Powder, being given in the Quantity of two or three Grains, is violently emetic. If it be for a long Time exposed upon Glass to a gentle Fire, and kept constantly stirred, it loses of its Violence, and becomes less active. This Powder contains not the least Mercury, but is a pure Regulus of Antimony.

Bezoardicum Minerale.

Bezoar Mineral.

Take any Quantity of newly rectified Butter of Antimony, and gradually pour to it a due Proportion of Spirit of Nitre, that is so much as will stop the Effervescence; then draw off the floating Liquor from a Glass Vessel placed in a Sand-heat, till the Powder is left dry; upon which again pour a little Spirit of Nitre, and dry it a second time. Repeat the Operation a third time; then put the Powder into a Crucible, and commit it to the naked Fire, till it becomes almost red-hot; in which State let it be detained for half an Hour. *E.*

Its Operation is by Sweat; tho' it will also sometimes purge. It will eradicate even *Leprosies*, as *Quincy* informs us, and the most obstinate Cases of that Kind, if rightly managed. Some count it a Resister of Poisons, and commend it in Pestilential Distempers. Its Dose is from ten Grains to half a Dram, according to the above-quoted Author.

Bezoardicum Foviale.

Bezoar of Tin.

Take Regulus of Antimony three Ounces; melt it in a Crucible, and add to it two Ounces of very pure

pure Tin, so as to make a new Regulus thereof, which being levigated, mix therewith five Ounces of corrosive Mercury sublimated; distil it in a Retort, and fix the Butter thence distilled, by three repeated Distillations, with thrice its Weight of Spirit of Nitre; afterwards calcine it, and whilst ignited, quench it in a sufficient Quantity of Spirit of Wine, and lastly dry the Powder. *E.*

This much resembles Bezoar Mineral.

Antihædicum Poterii.

Poterius's Antihectic.

Take of the Regulus of Antimony, made with Iron, six Ounces; of the best Tin, three Ounces; melt these together in a Crucible, and pour them into a Mortar first heated and greased with Tallow; and when the Mass is cold, reduce it to Powder; then add thereto thrice its Weight of very pure Nitre, and throw the whole into an ignited Crucible, by a Spoonful at a time, where it will make a Detonation, and calcine for an Hour; then grind the Mass again to a very fine Powder, and pour thereto a due Proportion of hot Spring-Water, and stir them about with a Pestle till the Water grows milky, which being thus saturated with the fine Powder is to be poured off, and fresh hot Water again added to the remaining Powder, and this to be repeated till nothing is left at the Bottom, but a dirty Matter that will not dissolve; then let all the milky Liquors stand at Rest together, that the fine Powder may be precipitated, which is afterwards to be several times washed in warm Water, and then dried. *E.*

The Character given of this Me-

dicine by Quincy is, that it is accounted a forcible, penetrating Medicine, inasmuch as to make Way thro' the minute Passages, and search even the nervous Cells; whereupon in all Disorders from that Original, it is reckoned very effectual. In those Heavinesses of the Head, Giddinesses, and Dimness of Sight, whence proceed *Apoplexies* and *Epilepsies*, it does great Service. And in all Affections and Foulnesses of the *Viscera* of the lower Belly, it is reckon'd inferior to nothing, in cleansing away and discharging their Impurities. Thus it obtains in the *Jaundice*, *Dropsies*, and all Kinds of *Cachexies*. It is likewise esteem'd of great Service, even in obstinate venereal Cases; in clearing the Blood from all Impressions of Contagion; and cleansing the Glands from those corrosive Recrements which such Distempers frequently lodge upon them, and occasion Blotches and ulcerous Deformities. In short, there is hardly a Preparation in the *Chymical Pharmacy* of greater Efficacy in most obstinate Chronic Distempers; but is not often met with in Prescription, altho' constantly kept in the Shops. The Dose is from six Grains to a Scruple, in grown Persons; for it is seldom given to Children, their tender Vessels not well bearing the Force of such Medicines.

Tartarum Emeticum.

Emetic Tartar.

Take washed Crocus of Antimony, Crystals of Tartar, of each half a Pound; of Water three Pints. Boil them together for half an Hour, then filtre the Water thro' Paper, and after a due Evaporation set it by, that the Salt may crystallize. *L.*

This is a pretty brisk Emetic, in the Quantity of a few Grains. And I have Reasons to believe it much more

more effectual than *Ipecacuanha*, which is at present the fashionable Vomit.

Kermes Mineralis, five *Pulvis Carthusianorum*.

Kermes's Mineral, or *Poudre des Chartreux*.

Take of Antimony four Pounds, Solution of fixed Nitre *per Deliquium* one Pound, Rain Water 3 Pounds, and boil them for two Hours. Then the boiling Decoction is to be passed thro' Cap Paper; set it in a quiet Place for twenty-four Hours, till a yellowish, or saffron-coloured Powder sinks to the Bottom of the Vessel, the Liquor remaining clear. This Liquor being poured off by Inclination, the Powder is first washed by frequent Affusions of warm Water, till it is deprived of all its Salts, and then about four Ounces of Spirit of Wine are burnt upon it, and it is afterwards dried, and kept for Use.

This Powder is looked upon almost as a *Panacea*, or universal Remedy. It sometimes excites Vomiting, especially when it meets with any Acid in the Stomach, and is sometimes cathartic, diaphoretic, and sudorific, according as it is determined by the Disposition of the Patient to act upon any one Humour more than another. It is given from one to four Grains, or sometimes when it is designed only to attenuate and divide any Viscidities in the Fluids, in the Quantity of half a Grain, repeated every three, four, or six Hours. In acute Fevers, where there is a great Crudity and Spissitude of the Humours, it is given in small Doses with Success. It changes the crude and ferous Evacuations by Stool into a more bilious Consistence, by attenuating the viscid Bile, and so disposing it to pass off by Stool. It is often given with Success in the Beginning

of the Small Pox and Measles, when they are apprehended to be of a bad Sort, at small Doses, mixed with Bezoardic Powders, or Absorbents, such as Crabs Eyes, red Coral, Pearl, Egg-shells, Crabs-Claws, and the like; for thus it excites a Spitting and Diaphoresis, removes Anxieties, corrects the Lympha, and coagulated Serum, and raises such an Effervescence in the Blood, as tends to purify it. *Glauber* confirms these Virtues by the Example of seven Children in the Small Pox. *Frederic Hoffman* commends the Use of this Powder in stubborn autumnal Agues, because it powerfully opens Obstructions, particularly of the Liver, by which these Fevers are produced, especially when taken in the Quantity of a Grain, mixed with detergent antifebrile Salts, such as the Salt of Wormwood, the febrifugous Salt of *Sylvius*, vitriolated Tartar, and the like. *Schroder* ordered it in the Quantity of half a Grain, or a Grain, three or four times a-day in the intermitting Fevers of Children, and commends it very much in correcting the Acrimony of the Serum, and especially that of the Tears, which give Pain in the Eyes, and produce very bad Ophthalmias. The same Author mentions a Woman labouring under scorbutic Symptoms, and Defluxions of so acid a Kind as to corrode her Lung, and bring on a Spitting of Blood, who by using this Sulphur of Antimony in very small Quantities, corrected the Acrimony, and stopped the Motion of this Serum, and thereby prevented the Growth of the Disease, which must otherwise have been of very fatal Consequence. *Hoffman* says it is the most effectual Remedy in such Chronical Diseases, as arise from long Obstructions of the Viscera. In a Dropsy, for Instance, it is very properly mixed with Filings or *Crocus* of Steel and Nitre; in Epilepsies with all the *Cinnabars*;

in the Scurvy with the *Arcanum Duplicatum*; in Dysenteries with the *Confectio de Hyacintho*; in a Dysury, or Complaints of the Stone, with white Nettle, or Pellitory Water; and even in Pleurifies and Peripneumonias, he frequently gives it in the Quantity of three or four Grains in a Glass of strong *Spanish Wine*, in *Carduus Water*, in an Infusion of red Poppies, or the Juice of Dendelion, or Borage. *Junker* observes, that this Powder has in many Patients suspended, in one Moment, the Effects of a suffocating Catarrh, sometimes by producing a gentle Vomiting, sometimes by Sweating, and sometimes without any sensible Evacuation; and he advises it to be mixed in these Cases with a certain digestive Salt. It may be given very advantageously to cachectic Girls, in the Quantity of a Grain mixed in ten Grains of *Crocus Martis aperiens*, and of the *Arcanum Duplicatum*, the Dose being repeated twice a-day; this Powder may be given either

alone, or mixed with a little Sugar, and diluted in Wine or Water, or any other proper Liquor. It is likewise sometimes given with Oil of Sweet Almonds, or in Conserve of Violets, Borage, &c. in Form of a Bolus.

It is, however, to be carefully observed, that this Powder is not to be given till the Quantity of Blood has been lessened, and all the Fluids sufficiently diluted and attenuated; for as by the Use of it, the Blood is very suddenly rarified, and put into a Kind of Effervescence, if the Vessels are before full, they must be still more distended, by the increased Heat and Motion of the Blood, and other Fluids, and hurtful Congestions may be formed in the Viscera. It ought, therefore, never to be given till the Dangers from a Plethora are taken off, and till the Humours have been render'd fluid by great Quantities of Diluents often repeated.

F I N I S.

A

Copious INDEX

OF THE

ARTICLES used in PHYSICK, SURGERY, both in *Latin* and *English*, and of DISEASES, with numerous References to their Remedies.

TO avoid the Perplexity of searching for any Particulars required, attending Three Indexes, and their referring to one another, we have thrown Our's into One only: And this directs to the Columns of the Page, distinguished by i for the first, and ii for the second.

The Diseases and References to the Remedies are also more particularly pointed out, where requisite; as, for Instance, in the Menfes, whether to promote, or restrain them: So in Fevers, whether intermittent, putrid, &c. But where there is no such Distinction, preceding the Figures directing to the Page, it is mostly to be understood, that the Disease in general is intended.

It may not be improper always to view over the whole Column directed to, because the same Word many times occurs more than once therein.

It ought to be observed, that the Words, more immediately preceding the Figures, often lead to the initial Words; as, for Instance, Abortion, to promote, 213, ii.—to prevent, 439, ii.—are to be read, To promote, or to prevent Abortion: Again, Animals, poisonous, to keep at a Distance, 257, ii.—is to be read, To keep at a Distance poisonous Animals: And so of the rest; after which Directions, it is presumed, even the younger Pupils can make no Mistakes.

A.
BDOMEN, Inflammations of the, 279, ii.—533, i.
Abies, 200, i, ii.—201, i.
Abortion, too frequent, to help, 165, i.—439, ii.—484, i.—513, ii.—515, i.—526, ii.—to promote, 213, ii.—238, i.—314, i.—318, ii.—572, ii.—593, ii.

Abrotanum, 201, i, ii.
Abrus, 201, ii.
Abscess, of the Liver, how produced, 39, i.—to cleanse, 201, i.—good for, 257, ii.—258, ii.—261, ii.—286, ii.—377, ii.—429, ii.—453, i.—internal, 455, ii.—468, ii.—493, i.—511, ii.—516, ii.
Absinthium, 202, i, ii.—203, i.—474, i.
Abutnon, 203, ii.

Acacia, 203, ii.—264, i.—Bastard, 412, i.
Acantbus, 204, i.
Accipiter, 481, i.
Acer, 474, i.
Acetosa, 204, ii.—205, i.
Acetofella, 205, i.
Acetum, 205, i.—*Distillatum*, seu *Spiritus Aceti*, 659, ii.—*Litbargyrites*, ib.—*Rosaceum*, 660, i.—*Scilliticum*, ib.—*Tberiacale*, ii.
Aphates, 535, i.

Achore,

I N D E X.

Achors, 236, i. — 360, ii.
— of the Head, 508, ii. —
559, ii.
Achs and Pains, old, 249, ii.
Aenas, 206, ii.
Acids described, 55 to 62.
— their Origin, 55, i. —
the native of Vegetables, ib.
— of Fossils, 56, i. — of Animals, ii. — the factitious,
of Vegetables, 57, i. — of
Fossils, 58, i. — of Animals,
ii. — the Method to discover
their Quantity, ib. — the
different Virtues thereof, 59,
i, ii. — their common Prop-
erties or Effects, 60. — their
Use, 61, i. — and Excellence
in many Diseases, 62, i. —
wherein — and to whom pre-
judicial, ii. — perpetually
float in the Air, 110, ii. —
112, i. — when naked, the
greatest Poisons in Nature,
ii. — the most ponderous of
all Fluids, 114, ii.
Acidule, 139, ii.
Acnella, 206, ii.
Acotium, 206, ii.
Acopaz, 561, i.
Acorus, 207, ii.
Acrimony, 306, ii. — 320,
i. — 334, ii. — 342, ii. —
343, i. — 346, ii. — 356, ii.
364, i. — 366, i, ii. — 384,
i. — 411, ii. — 464, ii. —
467, i. — 469, iii. — 572, ii.
— 694, ii. — 714, ii. — 813,
i. — 835, i.
Acrochordones, 416, i.
Acus, 481, i.
Adamas, 536, i.
Adarces, 207, ii.
Adiantum, 207, ii. — 209,
i. — 474, ii.
Adder's tongue, 386, ii.
Aegileps, 209, i, ii.
Aeruga, 536, i.
Æthereal Oil, 769, ii.
Æthiopsis, 209, ii.
Æthiops Mineralis, (Mine-
ral) 824, i. — *Antimonialis*,
(Antimonial) ib.
After-birth, 476, ii. — 477,
ii. — 507, i. — Pains, 354,
ii. — 391, ii.
Agallochum, 209, ii.
Agaric, 210, ii.
Agaricus, 210, i.
Agate, 535, i.
Ageratum, 217, i.
Agilis, old, *Ovis*, 523, i.

Agnus Castus, 211, ii. — *Scy-
thicus*, 474, ii.
Agrifolium, 212, i.
Agrimonta, 212, i.
Agrimony, (*Ageratum*) 211,
i. — 212, i. — Water-hemp,
255, i. — Hemp, 315, ii.
Ague, 585, i. — tertian, 638,
i. — autumnal, 835, i. — ter-
tian, 258, ii. — 436, i. —
484, i, ii. — quartan, 491, ii.
— 502, i. — 517, ii. — 527, i.
— 538, i. — 565, ii.
Air described, 5, to 25. — ne-
cessary to human Life, 5, i.
— its Fluidity, ii. — Resist-
ance, 6, ii. — Weight, ib. —
Pressure, 7, i. — *Boerhaave's*
Opinion of it, ii. — its Elas-
ticity, ib. — what Kind acts
most on the Sails of Ships,
8, ii. — how affected at Sun-
rising, ib. — its Composition,
9, i. — that of the Island of
Juwa, in the *East-Indies*,
described, ii. — how to know
the Quantity of Water in it,
10, i. — Spirits it contains,
ib. — its Acid, ii. — like a
Scythe, 11, ii. — its Motion
and Rest, ib. — Weight of
that which is external and
incumbent, 13, ii. — surpris-
ingly affects and changes
Bodies, 14, i. — the internal
described, 15, i. — its Effects
on human Bodies, ii. — ac-
cording as it is affected by
celestial and terrestrial Bo-
dies, 16, i. — too hot and
scorching, ii. — too cold and
chill, 17, i. — too moist, 18,
ii. — too dry, 19, i. — too
heavy, ib. — too light or ra-
rified, ib. — how to procure
it in close Rooms, 20, i. —
serene, mends chronic Dis-
eases, ii. — how to correct
the bad Qualities of it, 21,
i, ii. — 22, i, ii. — 23, ii. —
24, i. — how its Infection is
known, ib. — what noxious
to it, 22, ii. — 23, i. — what best
to live in, 24, i, ii. — the
Life of Vegetables, as well
as Animals, 112, ii. — mal-
ignant, to correct, 232, i.
— 255, i. — 273, i. — 348, i.
— 423, i. — 488, i. — 808, i.
Alabastrum, (*Alabastr*) 537,
ii.
Alaternus, 213, i.

Alauda, 481, i, ii.
Album Græcum, vid. *Canis*,
492, ii.
Alcalies described, 63, to 74.
— Derivation of the Word,
63, i. — Substances refer'd
to them, ii. — their Cha-
racters, 64, i. — how pro-
cured, ii. — known to the
Ancients, 65, i. — whence
they derive their specific
Nature, ii. — into what
Parts resolvable, 66, i. —
may be greatly altered, ii.
— the most common, how
produced, ib. 67, i. — their
Properties, ib. — attractive
Power, ii. — whether they
repel Air, discussed, ib. —
attract and unite with *Al-
cobol*, 68, i. — act other
ways on vinous Spirits, ib.
— unite intimately with dis-
tilled vegetable Oils, ii. —
which is endued with ex-
cellent medicinal Virtues,
69, i. — unite with expres-
sed Oils, ib. — attract all
kind of Acids, 69, ii. —
Distinctions of them and
their Produce, 70, i. —
Manner of acting in Con-
junction, ib. ii. — difficult
to be separated, 71, i. —
attract some Acids more
than others, ii. — as the A-
cids are changed, so are the
new-generated Salts, ib. 72,
i. — the new Combinations
affected without any consi-
derable Effervescence, ii. —
their Effects as Medicines,
73, i. — of what Use to Sur-
geons, 74, i. — Cautions in
their Use, ii.
Alcanna, 213, ii.
Alce, 481, i.
Alcea, 213, ii.
Alcedo, vid. *Uspida*, 513, ii.
Alchimilla, 214, i.
Aleyconium, 474, ii. — 475, i.
Alder-tree, 219, i. — 220, i.
Alexanders, 444, ii.
Alexipharmics, why so cal-
led, 162, i. — 164, i. — their
ill Effects, 162, — the dif-
ferent Kinds of them, 163,
i. — how they act, ib. —
Doses, and Treatment, ii.
— to be used with Caution,
163, ii. — 164, i. — when
serviceable, ii. — and best
operate,

I N D E X.

- operate, 165, i. —Diaphoretics, ib. —their Operation, ii. —are highly necessary, 166, i. —preferable to Alexipharmics, ii. —the sudden Effects of which are accounted for, 167, i.
- Alexiterial Water, 632, ii. —spirituous, 642, i. —the same with Vinegar, ib.
- Alga*, 475, i.
- Alkanet, 229, ii. —yellow, 475, ii.
- Alkekengi*, 214, i.
- Alkermes*, Confection of, 717, ii.
- Alliaria*, 215, ii.
- Allium*, 216, i. —219, i, ii.
- All-heal, 317, ii. —Clown's, 323, ii. —*Hercules's*, 394, ii. —Candy, 480, i.
- All-spice, 281, i.
- Almond-tree, 226, i. —Soap, 785, i.
- Almonds, bitter, 226, i. —sour, 227, i. —Oil of, 737, ii.
- Alnus*, 219, i. —220, i.
- Aloe, 138, i. —140, i, ii. —220, i. —222, i.
- Aloes, 138, i. —140, i. —Caution in the Use of, ii. —220, ii. —222, i. —Elixir of, 681, i. —Gum and Refin of, 714, i. —Water, 475, ii. —Wood, 209, ii. —Alcaline Wine of, 681, i.
- Aloides*, 475, ii.
- Alpecras*, 352, i. —416, i. —482, i, ii. —497, ii. —499, ii. —506, ii. —509, i. —510, ii. —515, ii. —516, i. —522, i. —531, i, ii. —533, ii. —534, ii.
- Alp, 527, i.
- Alpi*, 348, ii. —352, ii. —531, ii.
- Alpius*, 504, ii.
- Alpine*, 222, i.
- Alteratives, 143. —Abforbents, 144, i. —how they operate, ii. —Caution, ib. —145, i. —their Virtues superior to others, 145, ii. —Lenients, or Temperatives, 146, i. —how they act, ib. —Attenuatives, 147, i. —how they act, ii. —their Virtues numerous, 148, i. —Emollients, 149, ii.
- Albæa*, 222, ii. —223, ii.
- Alum, 537, ii. —Roch, and feather'd, 538, i. —burnt, 802, i. —Curd, 761, i. —Water, 656, i. —*Bate's*, ii. —Whey, 695, ii.
- Alumen*, 537, ii. —538, i. —*Ussum*, 802, i.
- Alypum*, 223, ii.
- Alyssum*, 223, ii. —224, i.
- Amalgama Jovis*, 812, i.
- Amaranthus*, 224, ii.
- Amber, 590, ii. —Compound Powder of, 715, ii. —Liquid, 359, ii. —Salt, Spirit, and Oil of, 810, ii. —rectified Salt of, ib. —Tincture of, 676, i. —*Hoffman's*, ib.
- Ambergriſe, 538, i.
- Ambra*, 538, i.
- Ambrosia*, 224, ii. —475, ii.
- Ambuſtions, 264, ii. —364, ii. —377, ii. —479, i. —523, ii. —558, i. —567, i.
- Ametheſtus*, 539, ii.
- Amiantus*, 539, ii.
- Ammi*, 224, ii.
- Ammoniac, prepared Gum, 625, i. —Oil of Gum, 769, ii. —Plaiſter, with Quickſilver, 754, ii.
- Amomum*, 215, i, ii. —Tree, 225, i, ii.
- Amoris Pomum*, 225, ii.
- Ampelitis*, 540, i.
- Amygdalus Amar*, 226, i.
- Amylum*, 227, i.
- Amytheſt*, 539, ii.
- Anacardium*, 228, i. (or *Malacca Bean-tree*) 228, i.
- Anacollema*, 509, i.
- Anagallis*, 228, ii. —229, ii.
- Anagyris*, 229, i.
- Ananas*, 229, i.
- Anas*, 482, i.
- Anaſarca*, 142, i. —368, i. —523, ii. —828, ii.
- Anchovy, 506, ii.
- Anchuſa*, 229, ii. —475, ii.
- Anchyloſis*, 424, i.
- Androſace*, 229, ii.
- Androſæmum*, 230, i.
- Anemone*, Garden, Wood, and wild, 230, i.
- Anelbum*, 230, i.
- Angelica, 231, ii. —232, i, ii. —preserved, 707, ii.
- Angina*, 19, i. —260, ii. —261, i.
- Angiana*, 475, ii.
- Anguilla*, 482, ii.
- Anguis*, vid. *Serpens*, 528, i.
- Anhalt-water*, Compound, 642, i.
- Animals, uſed in the *Materia Medica*, 481, to 535. —poisonous, to keep at a Diſtance, 257, ii. —261, i. —322, ii. —500, i. —561, i. —Chymical Preparations of, 787. —Oil of, 791, ii.
- Aniſe, 232, ii.
- Aniſeed-water, Comp. 646, i. —Oil of, 762, i. —763, i.
- Aniſum*, 232, ii.
- Anodynes, 151. —Soporifics, ib. i. —theſe, and Stupefactives, or Narcotics, being poiſonous and dangerous, to be very cauſtiously uſed, ii. & ſeq. —Elements by which they exert, 152, ii. —their Virulence corrected by Acids, 153, i. —how they act, ib. —divers Inſtances of their terrible Effects, ii. —154, i. —156, i. —Hypnotics ſerviceable, 155, i. —158, i, ii.
- Anodyne Balm, of *Guido*, 740, i. —of *Bates*, 741, ii. —Mineral Liquor, *F. Hoffman's*, 803, i. —Plaiſter, 755, i. —Pills, 731, i.
- Anonis*, 233, i.
- Aniſer*, 482, i, ii.
- Ant, 597, ii. —Horse, 508, i.
- Antelope, 482, ii.
- St. *Anthony's Fire*, 302, i. —306, ii. —355, ii. —419, ii.
- Anthora*, 233, ii.
- Anthyllis*, 234, i.
- Antilope*, 482, ii.
- Antirrhinum*, 234, i.
- Antibædæcicum Poterit*, (*Poterius's Antihect*) 833, ii.
- Antihyſteric ſpirit, 650, ii. —Plaiſter, 755, i.
- Antimonial Wine, 684, ii.
- Antimonium*, 540, i. —*Dia-phoreticum Nitratum*, 826, ii. —Dulce, ii.
- Antimony, 540, i. —Tincture of, 662, ii. —ſimple acrid, ib. —Crocus of, 825, ii. —washed, ib. —Diaphoretic, with Nitre, 826, i. —ſweet diaphoretic, ii. —Regulus of, 827, i. —with Iron, ib. —Medicinal, ii. —Glaſs of, 829, i. —in Powder, 830, i. —Golden Sulphur, 831, i. —Butter of, ii. —Cinnabar of, 832, ii.
- Anus*, Diſorders of, 239, ii.

I N D E X.

- 361, ii.—407, ii.—421, i.—
 464, ii.—465, i.—480, ii.—
 492, ii.—517, i.—518,
 ii.—522, i.—523, i.—527,
 ii.—532, ii.—533, i.
 Anxieties, 212, ii.—835, ii.
 Aparine, 234, i.
 Ape, 529, ii.
 Apepsia, 589, i.
 Aper, vid. Porcus, 525, i, ii.
 Apes, 482, ii.
 Apthæ, 264, i.—422, ii.—
 427, ii.—438, i.—464, i.—
 475, ii.—808, ii.
 Apium, 234, ii.—475, ii.
 Apocynum Syriacum, 412, ii.
 Apoplectic Balsam, 740, i.
 Apoplexies, 280, ii.—282, ii.—
 285, i.—338, i, ii.—339,
 i.—345, ii.—354, i.—356,
 ii.—358, i.—367, ii.—368,
 i.—370, ii.—391, ii.—421,
 ii.—448, ii.—468, ii.—
 492, i.—498, ii.—517, ii.—
 542, i.—565, ii.—621, ii.—
 642, ii.—644, i.—678, i.—
 683, ii.—684, i.—707, i.—
 789, ii.—790, i.—792, ii.—
 828, ii.—834, i.
 Apos, 484, i.
 Apostems, and malignant Ul-
 cers, how produced, 23, ii.—
 to cure, 240, i.—434, i.
 Apothecaries, their Duty, 2,
 i.—and Privileges, ib.
 Appetite, Loss of, 139, i.—
 202, i.—225, ii.—237, ii.—
 239, i.—250, i.—268, i.—
 275, i, ii.—296, i.—302, ii.—
 310, i, ii.—326, i.—329, ii.—
 358, ii.—374, i.—383,
 ii.—385, i.—411, i.—417,
 ii.—421, i.—442, i.—469,
 i.—473, ii.—478, i.—489,
 i.—521, ii.—588, ii.—589,
 i.—595, i.—605, ii.—618,
 ii.—655, ii.—672, ii.—
 684, i.—729, i.—744, i.—
 796, ii.—797, ii.—801, ii.
 Apple-tree, 364, ii.—mad,
 and Crab, 365, i.
 Apricock-tree, 237, ii.
 Aqua Absinthii Composita, 641,
 ii.—Alexiteria, 632, ii.—
 Alexiteria Spirituosa, 642, i.
 —Idem, cum Aceto, ib.—
 Anbaltina, ib.—Alumina, 656,
 i.—Alumina Bateana, ii.—
 Bryonia Composita, 642, ii.—
 Calceis, seu Benedic-
 ta, 656, ii.—Calceis minus
 Composita, 657, ii.—Calceis
 magis Composita, ib.—Casto-
 rei, 633, i.—Cinnamoni sine
 Vino, ii.—cum Vino, 643, i.—
 Corticum Aurantium sim-
 plex, 633, ii.—spirituosa,
 643, i.—Epidemia, 643, ii.—
 Fortis simplex, (simple)
 802, i.—duplex, (double) ib.—
 composita, (compound) ib.—
 Hordeata, 694, ii.—Ju-
 niperi Composita, 644, i.—
 Mellisse Composita, 643, ii.—
 Mentha Piperitidis sim-
 plex, 634, i.—spirituosa,
 644, i.—Vulgaris spirituosa,
 ii.—Mirabilis, 644, ii.—
 Nephratica, 644, ii.—Nveis
 Moschata, 645, ii.—Oph-
 thalmica, 657, ii.—Ophthal-
 mica altera, 658, i.—Petro-
 selini Composita, 645, ii.—
 Phagedænica, 658, ii.—Pi-
 peris Jamaicensis, 634, i.—
 Peonia Composita, 645, i.—
 Pulegii spirituosa, ii.—Ra-
 nunculi pratensis, 634, i.—
 Raphani Composita, 645, ii.—
 Regia, 802, ii.—Regina
 Hungaria, 646, i.—Rosa-
 rum Damascenarum, 634, ii.—
 Sapphirina, 658, ii.—
 Sclopeteria, five Vulneraria,
 646, i.—Seminum Anethi,
 634, ii.—Anisi Composita,
 646, ii.—Cardimoni, 647, i.—
 Carui, ib.—Spermatis Ra-
 narum, 634, ii.—Stryptica,
 658, ii.—Sulphurata, 808,
 ii.—Tberiacalis, 647, i.—
 Vitriolica Camphorata, 658,
 i.—Carulea, 659, i.
 Aquæ Minerales, 542, i.
 Aquilegia, 235, i.
 Aquila, 484, i.
 Araneus, 484, i, ii.
 Arbor Saponaria, 476, i.—
 Vitæ Leaves, Simple-water
 of, 638, i.
 Arbutus, 476, i.
 Archangel, red, 352, i.—
 white, ii.—yellow, 356, i.
 Ardea, 484, ii.
 Areca, 235, ii.
 Arethorolophus, 214, ii.
 Arena Maris, 542, ii.
 Argenti Vivi Purificatio, 815,
 i.
 Argentina, 236, i.
 Argentum, 542, ii.
 Argilla, 542, ii.
 Arica, 476, i.
 Aries, vid. Ovis, 523, i.
 Arisarum, 236, ii.
 Aristolochia, 236, ii.—237,
 i, ii.
 Armeniaca Malus, 237, ii.
 Armeria, 237, ii.
 Armies, greatly affected by
 Winds, 11, i.—18, i.
 Armoniac, Preparation of
 Bole, 625, i.
 Armoracia, 238, i.
 Arnica, 476, ii.
 Aromatic Pills, 726, ii.—
 Powder of, 713, ii.—Species,
 714, i.—Spirit, saline, 652,
 ii.—volatile, 653, ii.—Tinc-
 ture, 663, ii.
 Arrow-head, 426, i.—Root,
 ib.
 Arrows, to extract, 522, i.—
 569, ii.
 Arsenicum, (Arsenic) 542, ii.—
 its Effects to remedy,
 544, i.
 Arismart, 399, i.—spotted,
 ib.
 Artemisia, 238, i.
 Arteries, 333, ii.—371, ii.
 Arthanita, 239, i.
 Arthritic Pains, 263, i.—
 267, i.—303, ii.—304, i.—
 322, i.—334, ii.—366, ii.—
 369, i.—374, ii.—393,
 i.—470, i.—485, i.—493,
 i.—494, ii.—497, i.—500,
 i.—513, i.—535, i.—561, i.—
 741, ii.—817, i.
 Arthritis, 382, i.
 Artichok, 290, ii.—wild,
 291, i.
 Arum, 239, i, ii.
 Arundo, 240, i, ii.
 Asarabacca, 241, i.
 Asarum, 241, i, ii.
 Aschia & Thymallus, 484, ii.
 Asceites, 489, i.—491, i.—
 574, i.—619, ii.
 Asclepias, 241, ii.
 Ascyrum, 242, i.
 As Cupreum, 536, i.
 Aselli, vid. Millepedes, 519, ii.
 Asellus, 484, ii.
 Ash-tree, common, and
 round-leav'd, 320, ii.—
 365, ii.
 Asinus, 485, i.
 Asp, or Aspen-tree, 409, ii.
 Aspalathum, 209, ii.
 Aspalatus, 242, i.
 Asparagus, 242, i.—243, i.
 Aspora Arteria, 235, ii.—
 266, i, ii.—327, ii.—333,
 ii.—Gemma, 545, i.
 Asperites

I N D E X.

Asperities of the Skin, 226,
ii. — 266, i. — in general,
359, i. — Eye-lids, 524, i. —
535, i. — of the Fauces,
724, i.
Asperula, 243, i.
Asphaltes, 544, ii.
Asphodel, white, 243, ii.
Asphodelus, 243, ii.
Asplenium, 244, i.
Aspredo, vid. *Cernua*, 499, i.
Afs, 485, i.
Asses Milk, 140, i.
Astacus, 485, i, ii.
Asthma, 244, ii.
Asthmas, how induced, 17,
ii. — what relieves them, ib. —
208, ii. — 209, i. — 210, ii.
— 215, ii. — 223, i. — 227, i.
— 236, ii. — 237, i. — 239, ii.
— 249, ii. — 250, i. — 257, ii.
— 259, i. — 268, ii. — 275, ii.
— 279, ii. — 282, i. — 297, ii.
— 303, i. — 319, i. — 328, i.
— 333, i. — 336, ii. — 344, i.
— 345, i. — 348, i. — 356, i.
— 363, ii. — 367, ii. — 381, ii.
— 394, ii. — 399, ii. — 407, i.
— 426, i. — 434, i. — 435, ii.
— 444, ii. — 446, i. — 456, ii.
— 463, ii. — 470, ii. — 477, ii.
— 480, i. — 485, ii. — 516, i.
— 519, ii. — 528, i. — 546, i.
— 574, i. — 593, i. — 678, ii.
— 705, i. — 770, ii.
Astragalus, 244, ii.
Astrantia Nigra, 244, ii.
Astringents, in what their
Virtue consists, 172, i. — the
principal of them, ib. —
Means of their Operation, ii.
— uncommon Caution in
their Use, 173, i. — highly
dangerous in some Cases, ii.
Vulneraries of singular Ser-
vice, ib. — further Use, 181.
Asirotites, 545, i.
Atites, *Aquila Lapis*, 536, i.
Atra Bilis, 208, i. — 228, ii.
— 371, i. — 566, i.
Atractylis, 245, i.
Atrayene, 245, i.
Attriplex, 245, i. — 476, ii.
Atrophies, 222, ii. — 231, i.
— 267, i. — 485, i, ii. — 492,
ii. — 523, ii. — 524, ii.
Atragen, 415, ii.
Avena, 245, ii.
Avens, ordinary, 280, i.
Aurantia, 246, i.
Auricula Ursi, 247, i.
Auricula Jude, 247, i.

Auripigmentum, 545, i.
Aurum, 546, ii. — *Mosaicum*,
812, i. — *Musivum*, ib.
Axungia Vitri, 607, ii.
Azedaracb, 247, ii.

B.

B *Accbaris*, 476, ii.
Badger, 531, ii.
Balea, 486, i.
Balaustia, 247, ii.
Balaustine-tree, 247, ii.
Baldness, 208, i. — 482, i, ii.
— 494, i.
Balm, or Baum, 370, i. —
Bastard, ii.
Balsam-apple, male, 247, ii.
of Mecca, 161, ii. — of Inci-
sion, 249, i. — white and
black *Peruvian*, 249, i. —
of *Tolu*, ii. — Tree, Fruit of,
279, i. — white *American*,
248, i. — true, ii. — natural,
249, i. — of Life, 741, i.
Balsamic Syrup, 697, ii. —
Tincture, 663, ii.
Balsamics, their original Use,
176, i. — Derivation of the
Word, ii. — its Constituents,
ib. — the first among the An-
cients, 161, i, ii. — the differ-
ent Species of them, ib. &
seq. — those produced in our
own Country not inferior to
the foreign, 163, i. — from
Vegetables, ii. — of Amber-
grease and Amber, 164, i. —
great Correctors, ib. — uni-
versally extensive, 165, i. —
the most efficacious Prefer-
vatives, 166, i. — Caution, ii.
their Virtues not yet suffi-
ciently discover'd, 167, i.
Balsamina, 247, ii.
Balsamita Mas, 247, ii.
Balsams, artificial, 740.
Balsamum Anodynum, vulgò,
Guidonis, 740, i. — *Anody-
num Bateanum*, 741, ii. —
ad Apoplecticos, 740, i. —
Capivi, 248, i. — *Commenda-
toris*, 743, i. — *Ipecueba*,
248, i. — *Lucatelli*, 740, i. —
de Mecha, 248, ii. — *Perwei-
anum*, 248, i. — *Saponaceum*,
vulg. *Opodeldoc*, 741, i. — *To-
lutanum*, 249, ii. — *Trauma-
ticum*, 743, ii. — *Vride*, 744,
ii. — *Vite*, 741, i.
Balsamus Sulphuris simplex,
809, ii. — *Terebinthinatum*,
810, i. — *Anisatum*, &c. ii.

Bamia Moschata, 476, ii.
Banana, 250, i. — Tree, ib.
Bangué, 250, i.
Banillas, 250, i.
Banilia, 250, i.
Barbadoes-Tar, Oil of, 771, i.
Barbarea, 250, ii.
Barbel, 486, i.
Barberry, 254, i. —
Barberries, Jelly of, 705, ii.
Barlus, 486, i.
Bardana, 250, ii. — 251, i.
Bark, *Indian*, 281, i. — *Peru-
vian*, Extracts of, 772, i.
Barley, 342, i. — *French* or
Pearl, 479, ii. — *Indian* Cau-
stic, 478, i. — naked, 462, ii.
— Sugar, 709, i. — Water,
694, ii.
Barometer, how affected by
the Air, 7, i.
Barrenness, 242, ii. — 370, ii.
— 481, i. — 525, ii.
Barren-wort, 314, i.
Basil, common, 251, i. —
Cow, 463, i. — wild, 206,
ii. — white, 294, i.
Basilicon-Ointment, 746, i.
Basilicum, 251, i. — yellow,
746, i. — black and green, ii.
Bast, 457, i.
Bat, 533, ii.
Battata Virginiana, 251, i.
Batatas, 477, i.
Baths, for the Head, injuri-
ous, 182, ii.
Baum-water, comp. 643, ii.
— simple, 637, ii.
Bay-berries, Electuary of,
718, ii. — Strawberry, 476,
i. — Tree, common, 354, ii.
— broader-leav'd, 355, i. —
wild, ib.
Bellium, 251, ii.
Bead-tree, 247, ii.
Beans, Garden and Horse,
316, i. — *Ignatius's* and *E-
gyptian*, ii. — stinking, 302, i.
Bear, 534, ii.
Bear's-Breech, 204, i. — Foot,
340, i.
Bears-ears, yellow, 247, i. —
Sanicle, 301, ii.
Beaver, 498, ii.
Becubia, 248, ii. — *Nux*,
252, i.
Bedegwar, 253, i.
Beech-tree, 316, ii.
Bee-eater, 519, ii.
Bees, 482, ii. — Preparation
of, 625, i.

- Feet, white, and red, 254, i.
 Beetle, slow-legged, 487, ii.
 —Oil, 526, i.
Beben Albous, 252, i. — *Rubrum*, ii.
Belemites, 546, ii.
Bella donna, 252, ii.
 Bell-flower, *Syrian*, 369, i.
Bellon, 784, ii.
 Belly, to bind, 213, i, ii. —
 to loosen, 254, i, ii. — Pains
 of the, 257, i, ii. — to make
 soluble, 258, i, ii. — 259, ii.
 — 264, i. — 279, i. — to bind,
 284, i. — to make soluble,
 385, i. — to bind, 390, ii. —
 394, ii. — to mollify, 402, ii.
 — 443, ii. — to loosen, 447,
 ii. — to bind, 460, ii. — to
 loosen the, 467, i. — 477, i.
 — 488, i. — 501, ii. — 506, i.
 — 513, i. — 523, i. — 528, i.
 — 529, ii. — 532, i. — 540, ii.
 Belly-ach, dry, 585, i.
 Benjamin, Flowers of, 770, i.
 — Tree, 252, i.
 Ben-Nut, 326, ii.
 Bennet, Herb, 280, i.
Berberis, 254, i.
 Berries, Knot, or Cloud,
 287, i.
 Berry, *Indian*, 295, ii.
Beryllus, (Beryl) 547, i.
Beta, 254, i.
 Betle, 254, i.
Betonica, 254, ii.
 Betony, Water, 437, i. —
 Wood, 254, ii.
Betula, 255, i.
 Bezoar, 486, i. — 487, i. —
 Mineral, 596, ii. — 833, i.
 of Tin, ii. — Powder, 701, i.
Bezoardicum Minerale, 833,
 i. — *foviale*, ii.
 Bezoartic-Spirit of *Buffus*,
 650, ii.
Bidens, 255, i.
Bifolium, 477, i.
 Bile and Phlegm, to promote
 the Discharge of, 238, ii. —
 294, i. — 326, ii. — 340, i.
 — 341, ii. — 352, ii. — 361, i.
 — 366, ii. — 375, i, ii. —
 408, ii. — 409, ii. — 418, ii.
 420, ii. — 441, ii. — 444, ii.
 — 452, i. — 456, i. — 458, i.
 — 459, i. — 517, ii. — black,
 554, ii. — 559, ii. — 579, ii.
 — 614, i. — 637, ii. — 784, i.
 — 797, i. — 800, ii. — 801,
 ii.
 Billberry, 463, ii.
 Bind-weed, Lavender-leaved,
 275, i. — rough, 444, i. —
 — great, ii. — Mountain,
 446, i. — small, 479, ii.
 Bites of a Viper, to help,
 182, i. — 201, ii. — of a mad
 Dog, 223, ii. — 224, i. — of
 other venomous Animals, ii.
 — Viper, 228, ii. — mad Dog,
 ib. — of venomous Animals,
 232, i. — 233, ii. — 234, ii.
 242, i. — 250, ii. — 252, i. —
 Scorpions and Spiders, 256,
 i. — of a mad Dog, 260, i. —
 Vipers, 283, ii. — 289, ii. —
 of venomous Animals, 294,
 i. — 309, ii. — 311, i. — 324,
 ii. — 337, i. — of a Spider,
 347, i. — mad Dog, 357, i.
 — 359, i. — 361, ii. — 367, ii.
 — 368, i. — 373, i. — of ve-
 nomous Animals, 379, ii. —
 381, i. — 383, ii. — 384, ii. —
 385, i. — Scorpions and
 Spiders, 400, ii. — of a mad
 Dog, 401, ii. — venomous
 Creatures, 407, i. — 408, i.
 — 411, ii. — 419, ii. — 436, i.
 440, i. — Rattle-snakes, ib.
 — mad Dog, 456, ii. — ve-
 nomous Animals, 473, i. —
 476, ii. — 482, i. — mad Dog,
 492, ii. — 493, i. — venomous
 Animals, 499, ii. — of an
 Asp, 502, ii. — mad Dog,
 505, i. — venomous Animals,
 508, ii. — mad Dog, 509, ii.
 — 510, ii. — 511, i. — veno-
 mous Animals, 513, i. —
 515, ii. — 519, ii. — mad
 Dog, 521, i. — Scorpion, 521,
 ii. — 522, i. — venomous A-
 nimals, 523, ii. — 525, ii. —
 — mad Dog, 526, i. — 530,
 i. — of the Viper *Proffer*,
 532, ii. — mad Dog, ib. 533,
 i. — 534, ii. — of a Spider,
 548, ii. — mad Dog, 574, i.
 — 590, ii. — 596, i. — 710,
 ii. — 743, ii. — of a mad Dog,
 Powder against, 710, ii.
 Birch-tree, 255, i.
 Bird's-foot, 390, i.
 Birth (and Secundines) 239,
 i. — 250, ii. — difficult, 277,
 ii. — to accelerate, 309, ii. —
 356, i. — 444, ii. — 456, ii.
 — 535, s. — 550, ii.
 Birth-wort, round, 236, ii.
 — long-rooted, 237, i. —
 bushy-rooted, 405, i.
 Bishop's-weed, 224, ii.
Bislingua, 255, i.
Bismuthum, (Bismuth) 547, i.
Bistorta, (Bistort, or Snake-
 weed) 255, i.
 Bitter-sweet, 445, ii. — Tinc-
 ture, 662, i. — Wine, 684, ii.
 Bittern, 484, ii.
 Bitterness of the Mouth,
 135, i.
 Bitumen, 547, ii. — 583, ii.
 — *Judaicum*, 544, ii.
 Black-bird, 519, ii. — Cap,
 507, ii. — Tail, 519, i.
 Bladder, Disorders of, 215, i.
 — 248, i. — 264, ii. — 282,
 i, ii. — 314, ii. — 325, ii. —
 341, i. — 346, ii. — 347, ii. —
 348, i. — 356, ii. — 394,
 ii. — 400, ii. — 435, i. — 453,
 i. — 470, i. — 477, ii. — 488,
 i. — 502, i. — 509, ii. — 516,
 ii. — 567, i. — 789, ii.
Blatta, 487, i, ii.
Blattaria, 477, i.
 Bleeding always to precede
 Vomiting, 137, ii. — of a
 Vein, to stop, 228, ii. —
 244, ii. — 284, i. — 317, i, ii.
 — 344, i. — 374, ii. — 395, ii.
 — 398, i. — 449, i. — 469, ii.
 — 471, i. — 484, i. — of
 Wounds, 526, ii. — 561, ii.
 — 564, ii. — 569, ii. — 589,
 ii. — 599, ii. — at the Nose,
 813, ii.
 Blindness, 494, ii.
 Blistering Epithem, 760, i. —
 — Ointments, 749, i. —
 Plasters, 757, i, ii.
 Bites, white and red, 256,
 i. — small white, 477, i.
Bitum, 256, i. — 477, i.
 Blood, tainted, 149, i. — gru-
 mous, ib. — Reason of its In-
 crease in the human Body,
 176, i. — to purify, 208, i. —
 to check the violent Ebul-
 lition of, 255, ii. — Effusions
 of, 255, ii. — 256, ii. —
 to depurate, 257, i. — 258, i. —
 extravasated, 262, ii. — to
 dissolve, 265, i. — Loss of, ii.
 — its Vacuations, to pro-
 mote, 272, ii. — 273, i. — to
 purify, 282, i. — 290, i. —
 297, ii. — 300, i. — 314, ii. —
 321, ii. — to resolve, 325, i.
 — to increase the Lymph of,
 326, i. — to cleanse, 332, i.
 — to resolve, 336, ii. — to
 purge, 337, ii. — to resolve,
 343, ii. — Effervescence,
 346,

346, ii. — to purify, 347, i. ii.
 — 348, i. — 353, i. — 361, i.
 366, i. ii. — 378, i. — 383,
 ii. — 385, ii. — 388, ii. —
 394, ii. — Coagulations of,
 411, i. — to animate, 425,
 ii. — 441, i. — to dissolve,
 451, i. — 457, i. — to regu-
 late, 469, ii. — 472, ii. — to
 dissolve, 479, ii. — 485, ii.
 503, ii. — 512, i. — to puri-
 fy, 513, i. — 517, i. — 528,
 ii. — to dissolve, 545, i. —
 579, i. — 580, i. — to sweet-
 en, 589, ii. — 679, ii. —
 685, i. — 729, ii. — 782, ii. —
 792, ii. — 799, ii. — 800, ii.
 Blood-spitting, what Air best
 for it, 21, i. — vomiting it,
 how cured, 38, ii. — 138, ii.
 — 147, i. — 204, ii. — spit-
 ting, 208, ii. — 209, ii. — by
 the urinary Passage, 218, ii.
 — spitting, 222, ii. — Defect
 of, 223, i. — spitting, 224,
 ii. — vomiting, 226, ii. —
 227, ii. — coagulated, 239,
 ii. — vomiting, 255, ii. —
 257, i. — spitting, 264, i. ii.
 — 272, ii. — vomiting, ib. —
 spitting, 283, i. — 307, ii. —
 310, i. — 317, ii. — 334, ii. —
 336, i. — 337, i. — 340, ii. —
 341, i. — 343, i. — vomit-
 ing, 353, ii. — spitting, 355,
 ii. — 359, i. — 363, i. — 367,
 i. — 374, i. — 381, ii. — 385,
 ii. — 386, ii. — 392, ii. —
 398, i. — 399, i. — 407, ii.
 — 409, i. — and voiding, 413,
 ii. — 422, ii. — 443, ii. —
 464, ii. — 465, ii. — 466, i.
 — 469, i. — vomiting, 470,
 ii. — spitting, 471, ii. — 474,
 ii. — 490, i. — 501, i. — 503,
 i. — vomiting, 525, ii. —
 spitting, 549, i. — 565, i. ii.
 — 567, i. — 582, i. — 813,
 ii. — 835, i.
 Blood-wort, 353, i.
 Blows, the Effects of, 328,
 ii. — 344, i. — 518, i. —
 582, ii.
 Blubber, Sea, 334, ii.
 Blue-bottle, great and small,
 306, i. — Ointment, the
 stronger, 747, ii. — the
 weaker, ib.
 Boam-tree, white, 476, i.
 Boar, 525, ii.
 Bodies, their Volatility, Flu-
 idity, Fixity, Solidity di-

stinguished, 114. — which
 cannot be render'd fluid,
 118, ii. — and which with
 the utmost Difficulty, ib. —
 which most subject to Pu-
 trefaction, and which not,
 123. — volatile, particularly
 described, 128, 129. — im-
 moderately fat, to extenu-
 ate, 477, ii. — 563, i.
 Body, to enliven, 792, i. —
 to change, 821, ii.
 Boils, to heal, 206, ii. —
 243, ii. — 322, ii. — 411, ii.
 — 431, i. — 476, ii.
 Bole, 548, i. — Armoniac, ib.
 — white and yellow *Arme-
 nian*, German, white, and
French, 548, ii. — *Transyl-
 vanian*, 549, i. — Compound
 Powder of, without Opium,
 711, ii. — with, ib.
Boletus, 256, i.
Bolus, 548, i. ii. — 549, i.
Bombax, 256, i. — 328, ii.
Bombix, 487, ii.
Bonduch, 256, ii.
 Bone-binder, 583, ii.
 Bones, 428, i. — broken, 549,
 i. — to conglutinate, 583, ii.
Bonus Henricus, 256, ii.
 Boor-cole, 259, ii.
 Borace, 549, i.
Borago, 257, i.
Borax, 549, i.
 Borrage, 257, i. — Ever-
 green, 263, ii.
Bos, 488, i.
Botargum, *vid.* *Mugil*, 521,
 ii.
 Bots, in Horses, 348, ii.
Botrys, 257, i. ii.
 Bowels, Obstructions of, 254,
 ii. — 274, ii. — 277, i. —
 281, i. — 290, i. — 318, ii.
 — 488, ii. — 530, ii. — 772, i.
 Bower, upright Lady's, 294,
 i. — Virgin's, ib.
 Box, Oil of, 770, i. — Thorn,
 361, i. — Wodd, 265, ii.
 Brain, to strengthen, 207, i.
 — Disorders of, 228, i. —
 250, ii. — 254, i. ii. — 276,
 i. — 297, i. — 302, ii. — 321,
 ii. — 333, ii. — 337, i. —
 363, i. — 391, ii. — 394, ii.
 — 450, i. — 456, ii. — 461,
 ii. — 518, i. — 542, ii. — 548,
 ii. — 609, i. — *Sphacelus* of,
 621, ii. — 684, i. — 780, ii.
 Brakes, common, 318, ii.
 Bramble, or Blackberry-

bush, 422, i. — Stone,
 423, i.
Brasilia, 257, ii.
Brassica, 257, ii. — *Marina*,
 260, i. — 477, i.
 Brasil-wood, 257, ii.
 Breast, Disorders of the, 149,
 i. — 150, ii. — 208, i. — 209,
 i. — 223, i. — 227, ii. — 232,
 ii. — 234, ii. — 239, ii. —
 240, ii. — 253, ii. — 257, i.
 ii. — 263, ii. — 279, ii. —
 283, i. — 284, ii. — 294, ii.
 — 308, ii. — 326, i. — 385,
 ii. — 394, ii. — 395, i. —
 396, ii. — 401, i. — 425, i.
 — 442, i. — 445, i. — 448, ii.
 — 460, i. — 468, i. — 482, ii.
 — 530, ii. — Ulcers of,
 533, i. — 534, ii. — 535, i.
 — inflamed, 583, ii.
 Breasts, lax, 214, ii. — Fis-
 sures of, 223, i. — Swel-
 lings of, 244, i. — 252, ii.
 — Inflammations of, 314,
 ii. — 358, i. — to restrain
 their Growth in Virgins,
 559, i. — inflamed, 564, ii.
 Breath, to sweeten, 210, i.
 — 231, ii. — 232, ii. — 254,
 i. — Shortness of, 276, ii. —
 to sweeten, 292, ii. — 307, i. —
 346, i. — 367, ii. — 368, i.
 ii. — to sweeten, 370, ii. —
 372, ii. — 382, ii. — 421, ii.
 — 423, i. — 660, ii. — 801,
 ii.
 Breathing, Difficulty of, 256,
 ii. — 257, i. — 304, i. — 326,
 i. — 327, ii. — 333, i. — 338,
 ii. — 341, ii. — 344, ii. —
 347, ii. — 366, ii. — 435, ii.
 — 446, i. — 460, i. ii. —
 476, ii. — 678, i.
 Bricks, Oil of, 770, ii.
 Briony, white, 262, i. —
 black, 263, i.
Britannica Antiquorum, 260,
 ii. — *Virginiana*, 261, i.
Briza, 261, ii.
Bromus, 261, ii.
 Brook-lime, 229, i.
 Bloom, Butcher's, 261, ii.
 — common, 307, ii. —
 Rape, 390, i. — *Spanish*,
 323, ii.
 Bruises, 318, i. — 376, i. —
 441, i. — 492, ii. — 530, ii.
 — 741, i. — 743, ii.
Brasus Rufus, 261, ii.
Bryonia Alba, 262, i. — *Ni-
 gra*, 263, i.
 K k k 2

I N D E X.

- Bayony-water*, comp. 642, ii.
Bubulus, 490, ii.
Buboes, 218, ii. — 295, i.
 317, ii. — 341, i. — 399, ii.
 — Pestilential, 490, ii. —
 497, ii. — 508, ii. — 513, ii.
 — 523, i. — to ripen, 548,
 i. — 572, ii. — 593, ii.
Buccinum, 490, ii.
Buck-bean, 461, i.
Buck, Roe, 498, i. — Stone,
 513, i.
Buckhorn-Plantain, 300, i.
Buckthorn, 419, ii. — Syrup
 of, 702, ii. — 703, i. —
 Wheat, or Brank, 316, ii.
Buffall, 490, ii.
Bufo, 490, ii.
Bug, Wall, 502, i. — Church,
 519, ii.
Bugle, 264, i.
Bugloss, 263, ii. — Vipers,
 and Wall, 312, i. — Stone,
 386, ii.
Buglossum, 263, ii.
Bugula, 263, ii.
Bulbocastanum, 264, ii.
Bulbocodium, 264, ii.
Bulbonach, 264, ii.
Bulbus Vomit. 264, ii.
Bulimia, 509, ii.
Bull-finch, 527, i.
Bull-fits, 322, i.
Bunium, 477, ii.
Buphthalmum, 264, ii. —
 265, i.
Bupleurum, 265, i.
Buprestis, 491, ii.
Burdock, 250, ii. — white-
 headed, 251, i.
Burn-cow, 491, ii.
Burnet, 401, ii. — Saxifrage,
 and smaller, 402, i.
Burns, 213, ii. — 238, ii. —
 242, i. — 251, i. — 258, ii.
 — 271, ii. — 318, ii. — 358,
 i. — 360, i. — 396, ii. —
 409, ii. — 448, ii. — 449, i.
 — 452, ii. — 463, ii. — 492,
 ii. — 516, ii. — 526, ii. —
 585, i. — 612, ii. — 747, i.
Bur-reed, branched, 446, ii.
Burrough-duck, or Ber-gan-
 der, 534, ii.
Burja, *Pastoris*, 265, i.
Butea, 491, ii.
Buteon, 265, ii.
Butter-bur, 399, ii.
Butter-wort, 480, ii.
Butyrum Antimonij, 335, ii.
 — *Cera*, 794, ii.
Buxus, 265, ii.
- Buzzard*, 491, ii.
 C. — i. 502 —
C *Abbage*, white, 257, ii.
 — red, 259, i. — wild,
 ib. — 260, i.
Cacalia, 266, i.
Cachexies, 138, ii. — 202, i.
 — 207, i. — 236, ii. — 237,
 ii. — 262, i. — 264, i. — 269,
 ii. — 289, i. — 290, i. — 301,
 i. — 305, ii. — 309, i. — 315,
 ii. — 348, i. — 372, i. — 419,
 i. — 429, i. — 443, i. — 452,
 i. — 459, i. — 506, ii. — 518,
 i. — 565, ii. — 619, i. —
 663, i. — 672, ii. — 675, i. —
 727, ii. — 729, ii. — 731, ii.
 — 834, i.
Cackrel, 518, ii. — white,
 530, i.
Cacao Americae, 266, i.
Cacao-tree, 266, i.
Cactos, 268, ii.
Cacilia, 492, i.
Cajou, or *Cassu-tree*, 228, i.
Calambac-wood, 357, i.
Calaminaris Lapis, Calami-
 nar-stone, 551, i.
Calamine, Preparation of,
 625, i.
Calamint, 268, ii. — Moun-
 tain, Field, Water, and
 Hoary, 269, i.
Calamintha, 268, ii. — 269,
 i.
Calcination described, 86 to
 88.
Calendula, 269, ii. — 270, i.
Calitrapa, 269, i.
Calms, if very long, preju-
 dicial, 12, ii.
Caltrop, Water, 460, i. —
 another Kind, ib.
Calves-snout, 234, i.
Calx, 551, ii. — *Jovis*, 811,
 ii.
Camel, 492, i.
Camels-hay, 347, i.
Camelus, 492, i.
Camphora, 270, i.
Camphora, 270, i.
Camphorata, 274, i.
Camphorated Julep, 686, i.
Campion, Rose, and red,
 wild, 361, i. — white, wild,
 384, ii.
Canal-coal, 540, i.
Cancrum, 477, ii.
Cancellus, 492, i.
Cancers, of a small Kind,
 how eaten away, 74, i. —
 other, 505, i. — 510, i. —
 743, ii. — 811, i. — 252, ii.
 — 253, ii. — 266, i. — 278,
 ii. — 318, i. — 321, i. —
 323, i. — 339, i. — 382, ii.
 421, ii. — 436, i. — 445, i.
 — 466, i. — 491, i. —
 492, i. —
Cane, *Bambu*, 241, ii.
Canella Alba, 274, i.
Canis, 492, ii. — 493, i.
Cannabis, 274, ii.
Cannacorus, 275, i.
Cantabrica, 275, i.
Cantibarides, 493, i. — taken
 internally, its ill Effects,
 495, ii. — 496, i. — Tincture
 of, 664, i.
Capaiva-balsam, Oil of,
 770, i.
Caper, 497, i.
Capers, 275, i.
Capparis, 275, i.
Capra Alpina, 497, ii. — *Be-
 zoardica*, vid. *Bezoar*, 486, i.
Capreolus, 498, i.
Caprifolium, 275, ii.
Capsicum, 276, i.
Caranna, 276, i. — Gum, Oil
 of, 769, i. — Tree, 276, i.
Caraways, 279, ii.
Caraway-seeds, 762, i. —
 763, ii. — Water of, 647, i.
Carbo Fossilis, 552, i.
Carbuncles, 213, ii. — 256, ii.
 — 283, ii. — 379, ii. — pe-
 stilential, 490, ii. — 503, i.
 — 508, ii. — 511, ii. — 512,
 i. — 526, ii.
Carbunculus, 586, ii.
Carcinoma, 491, ii. — 523, i.
Cardamom, great, 276, ii. —
 common, 277, i. — Seeds,
 Tincture of, 664, ii. — Wa-
 ter of, 647, i.
Cardamomum, 276, ii.
Cardamindum, 477, ii.
Cardiaca, 277, i.
Cardiacs, what properly are
 such, 167. — too frequent
 Use of them pernicious,
 168, ii. & seq. — when pro-
 perly exhibited, 169, ii. —
 Distinctions and Observa-
 tions thereon, 170. — the
 best Sort, 171, i.
Cardialgia's, 208, ii. — 233,
 ii. — 276, ii. — 280, ii. —
 299, ii.
Cardialgic Lozenges, 735, i.
Cardimine, 1276, ii.
Cardonet, 293, i.
Carduels,

I N D E X.

- Carduelis*, 498, i.
Carduus, 277, ii.
 Caries of the Bones, 292, i, ii.—316, i.—680, ii.
Carlina, 278, ii.—477, ii.—478, i.
Carnolus, 589, ii.
 Carob-tree, 442, ii.—wild, ib.
 Carp, 498, i.
Carpio, 498, i.
Carpoballam, 248, ii.
Carpobalsamum, 279, i.
 Carrot, 308, i, ii.
 Carrots, deadly, 454, i.—of Crete, or Candy, 376, ii.
Cartbamus, 279, i.
 Cathartics, lenitive, laxative, and purgative, 137, 138, i.—Caution, 139, ii.—strong Purgatives, 140, ii.—their Fatality, 141, i. & seq.—Observation, 143, ii.
Carum, 279, i, ii.
Carus, 421, ii.
Caryophyllata, 280, i, ii.
Cascailla, 281, i.
Cassia Lignea-tree, 293, i.
 Cases, obstinate, 821, ii.—acute, 826, ii.—venereal, 834, i, ii.
Cassus, vid. *Bos*, 488, i.
Cassia, Electuary of, 719, i.
Cassia Fistula, 282, i.—*Lignea*, 292, i.
Cassina, *Alaternus*, (Castiny) 213, i.
Cassio-berry-bush, 293, ii.
Cassumunar, (Calumunar) 282, ii.
Cassanea, 283, i.
 Castor, 498, ii.—Tincture of, 664, ii.—Water of, 633, i.
 Cat, 499, i.
Cataplasma à *Cymino*, 760, i.—*Discutiens*, ib.—*Maturans*, ib.—*Suppurans*, ib.
Catamenia, to provoke the, 251, ii.—278, ii.—301, ii.—to restrain, 352, ii.—467, i.—729, ii.
 Cataracts, 395, ii.—400, ii.—503, ii.—534, i, ii.—821, ii.
 Catarrhs, whence arise, 17, i, ii.—to cure, 240, i.—245, ii.—267, i.—274, i.—297, i.—307, ii.—315, ii.—332, i.—336, ii.—533, ii.—372, ii.—376, ii.—385, ii.—402, ii.—427, ii.—431, i, ii.—437, ii.—442, ii.—450, i.—461, i.—467, ii.—479, ii.—549, i.—592, i.—593, ii.—642, ii.
 Catch-fly, 374, ii.
 Cate, 362, i.
 Caterpillar, 507, ii.
 Cathartic Extract, 728, ii.—Salt, *Glauber's*, 798, i.
 Cat's-foot, 337, i.—tail, 463, i.
 Cattle, to fatten, 256, ii.—Diseases of, 714, ii.
Catus & *Felis*, 499, i.
Catulus, vid. *Canis*, 492, ii.
Caucalis, 478, i.
 Caustic, the stronger common, 786, ii.—the milder, 787, ii.—Lunar, 811, i.
Causicum Commune fortius, 786, ii.—mitius, 787, ii.—Lunare, 811, i.
Cauterium Potentiale, 785, ii.
 Cayen-tree, 442, ii.
 Cedar of *Libanus*, 283, ii.—Wine, 283, ii.
Cedrus, 283, ii.—*Folio Compressi*, 283, i.
 Celandine, 287, ii.—the lesser, 288, i.
 Celery, 234, ii.—283, ii.
Celeis, 284, i.
Centaurium, 284, i.
 Centaury, great, and common, 284, i.
Cepa, 478, i.
Cephalalgia, 21, i.—173, i.—231, i.—297, i.—396, i.—421, i.—426, i.—508, ii.—533, ii.—epidemic, 582, ii.—655, ii.
 Cephalic Powder, 712, i.—Plaster, 755, ii.—Tincture, 665, i.—purging, ib.
 Cephalics distinguished, 171, ii.—particularised, 172, ii.—two Classes of them, 174, ii.—175, i.—a Caution as to Specifics, ii.—Plaisters, why pernicious, 182, i, ii.
Cera, vid. *Apes*, 482, ii.
Cerasus, 284, ii.—285, i.
 Cerates, 759, ii.
Ceratam de Lapide Calaminari, 746, ii.—*Album*, 759, ii.—*Citrinum*, ib.—*Epiloticum*, ib.—*Mercuriale*, ib.
Cernua, 499, i.
 Ceruse, Compound Powder of, 712, ii.
Cerussa, 812, ii.
Cereus, 499, i.—*Minor A-*

- mericianus*, vide *Bezoar*, 486, i.
Cetus, vid. *Sperma Ceti*.
Cevadilla, 478, i.
Chææfolium, 478, ii.
Chalabis Rubigo preparata, 815, i.
Chalcitis, (Chalcites) 553, i.
 Chalk, 559, i.—Julep, 686, ii.
 Chalybeate Wine, 685, i, ii.
Chalybs, vid. *Mars*, 570, i.—*cum Sulphure preparatus*, 814, i.—*Tartarisatus*, 813, ii.
Chama, 501, ii.
Chamaedrys, 285, i.
Chamaelea, 285, ii.
Chamaepitys, 287, i, ii.
Chamaeleon, 501, ii.
Chamaemelum, 286, i, ii.—287, i.
Chamaemorus, 287, i.
 Chameleon, black, 279, ii.
 Chamelion, 501, ii.
 Chamomile, wild, 286, i.—common, ii.—double, 287, i.—Flowers, Oil of, 762, i.—763, i.—Simple-water of, 638, i.
Chamoris, or Gems, 497, ii.
Chancres, 743, ii.—748, i.
 Characters of Abbreviations, 624, ii.
Chardon, 268, ii.
 Charlock, 417, ii.
 Chaste-tree, 211, ii.
 Cheese-rempe, 323, ii.
Chelidonium, 287, ii.—288, i.
 Cherry-bay, 354, i.—tree, red, 284, ii.—*Morello*, black, Birds, Rock, 285, i.—Cornelian, 300, ii.—Winter, 214, ii.
 Chervil, 478, ii.
 Chest-nut-tree, 283, i.—Horse, 342, i.
Chia Tara, 558, i.
 Chiches, white, and wild, 289, ii.
 Chick-weed, 222, ii.—Sea, 341, ii.
 Chilblains, 251, i.—302, i.—386, i.—416, i.—482, ii.—485, ii.—516, i.—526, i.
 Child, dead, to expel, 276, i.—507, i.
 Child-bed Purgations, 245, ii.—Pain, 308, ii.—500, i, ii.—501, ii.
 Child-birth,

I N D E X.

- Child-birth, difficult, 817, i.
 Children, to procure, 870, ii.
 Children's Disorders, Dentition, 223, i. — Achors, 259, i. — *Meconium*, 267, i. — of the Stomach, 277, i. — Flatulencies, ii. — Inflammations of the Hypochondria, ib. — Epileptic, 244, ii. — 278, iii. — Suppression of Urine, 284, ii. — Epilepsy, 285, i. — to discharge Water and Serum, 286, i. — Hernia, 288, i. — Lice, 295, i. — Crying, 303, i. — Concretions, in their Urine, ib. — Watchings, ii. — to incite them to Laughter, ib. — to cut their Teeth, 306, ii. — Epilepsy, 309, i. — Convulsions, 312, i. — Gripes, 316, i. — Epilepsies, 323, i. — Rickets, 329, i. — Dropsies, 335, ii. — Convulsive Coughs, 337, i. — Worms, 340, i. — Gripes, 346, i. — to help Dentition, 223, i. — 356, i. — Rickets, 359, i. — Epilepsy, Heart-burn, flatulent Gripes, 362, ii. — Acidities, 366, ii. — Whooping Coughs, 375, i. — dry Coughs, 381, ii. — Hernia, ib. — Convulsions, 384, ii. — Rickets, 391, i. — Epilepsies, 391, ii. — nocturnal Frights, 391, ii. — Worms, 394, ii. — Chin-cough, 413, i. — Itch, 416, ii. — chronic Diseases, 418, ii. — scabby Heads, 423, ii. — Worms, 447, i. — 451, ii. — Purple Fever, 461, ii. — Worms, 468, ii. — Hernias, 480, i. — to relax their Bellies, 482, i. — Itches, 485, ii. — Exomphalos, 488, i. — Dentition, 493, i. — Frights, ib. — Worms, 501, ii. — Chin-coughs, 504, ii. — Dentition, 505, i. — 507, ii. — hairy Cheeks, 508, i. — Prepuce, 509, i. — Epilepsy, 513, i. — Dentition, 516, ii. — Cough, 517, i. — Teeth, 518, i. — Epilepsy, 520, i. — Dentition, 523, ii. — to retain Urine, 527, ii. — Excoriations, 532, i. — Rickets, 541, ii. — Worms, ib. — 545, i. — Excoriations, 551, i. — Worms, 572, i. — 580, ii. — 584, ii. — Convulsions, 643, i. — Rickets, 670, i. — Worms, ib. — Fits, 681, i. — Gripes, 686, ii. — a pretty Purge for, 698, ii. — 702, i. — Worms, 710, ii. — a gentle Puke for, 804, i. — Rickets, ii. — Convulsions, 812, ii. — on the Breast, 831, i. — intermitting Fevers, 835, i. *China*, 288, i. — 289, i. — Bastard, 428, iii. — Root, 288, i. — *American*, 289, i. — Chin-cough, to relieve, 191, ii. — 267, i. — 281, ii. — 366, ii. *Chlorosis*, 428, i. — 436, i. — 443, i. — 452, i. — 456, i. — 466, i. — 571, i. — 637, ii. — 672, ii. — 727, ii. *Chocolate*, 266, ii. *Cholera*, 61, ii. — *Morbus*, 73, i. — 151, i. — 273, ii. — 314, ii. — 463, ii. — 501, ii. — 560, i. *Cholics*, 39, i. — 151, ii. — 212, i. — 213, ii. — 215, ii. — 216, ii. — 224, ii. — 227, ii. — 231, i. — 232, i. — 235, ii. — 249, ii. — 250, ii. — 256, ii. — 265, ii. — 267, i. — 273, ii. — 280, i. — 281, ii. — 282, ii. — 286, ii. — 291, ii. — 295, i. — 301, i. — 307, i. — 308, ii. — 309, i. — 314, ii. — 315, ii. — 318, ii. — 345, i. — 348, i. — 354, ii. — 359, i. — 366, ii. — 368, ii. — 369, ii. — 371, i. — 375, ii. — 376, ii. — 378, i. — 381, i. — 382, ii. — 396, i. — 399, i. — 413, i. — 420, i. — 423, ii. — 441, ii. — 444, ii. — 452, ii. — Stone, 453, i. — 456, ii. — 464, ii. — 465, i. — 466, i. — 473, ii. — 478, i. — 481, i. — 482, i. — 485, ii. — 489, i. — 492, ii. — 493, i. — 497, ii. — 498, i. — 499, i. — 500, ii. — 502, i. — 503, i. — 504, ii. — 506, ii. — 507, i. — 510, i. — 511, i. — 512, i. — 513, i. — 517, ii. — 518, i. — 519, i. — 520, ii. — 522, ii. — 523, ii. — 524, i. — 525, i. — 527, i. — 531, ii. — 534, i. — 561, i. — *Ipafmodie*, or hot, 581, i. — 605, ii. — 613, ii. — 619, i. — 682, ii. — 710, ii. — 741, ii. — 743, ii. *Cholic-water*, 371, i. *Choleric Habits*, 138, ii. *Chondrilla*, 289, i. ii. *Chough*, *Cornish*, 509, ii. *Chrysanthemum*, 478, ii. *Chrysocola*, vid. *Borax*, 549, i. *Chrysolitus*, (*Chrysolite*) 558, i. *Chrysopafius*, 558, i. *Christ's-thorn*, 392, i. *Chyle*, to promote, 442, ii. — to preserve, 608, i. — 637, ii. — to correct, 818, ii. *Chymical Preparations*, 787. *Chymist*, a Weed, 3, i. — not to be confided in, ii. *Chymistry*, how performed without Art, 4, ii. *Cicada*, 502, i. *Cicatrices*, to render full, 586, i. *Cicatrizing Cerate*, 759, ii. *Cicely*, sweet, 376, i. — wild, 478, ii. *Cicer*, 289, ii. *Ciccorium*, 290, i. *Cicindela*, 502, i. *Ciconia*, 502, i. *Cicuta*, 290, ii. — 442, i. *Cicutaria*, 478, ii. *Cimex*, 502, i. *Cimolia*, 558, i. ii. *Cinara*, 290, ii. *Cinnabar*, Artificial, 825, i. — Native, 558, ii. *Cinnabaris Antimonii*, 832, ii. — *Facilitia*, 825, i. — *Nativia*, 558, ii. *Cinnamon*, 762, ii. — true, 291, i. — 293, i. — Winter's, 301, i. — Tree, wild, 274, i. — Tincture of, 665, i. — Water without Spirit, 633, ii. — with, 643, i. *Cinnamomum*, 291, i. — 292, ii. — 293, i. *Cinquefoil*, 398, i. *Circulation* in Chymistry, what, 96, ii. — 97, i. *Cirsium*, 478, ii. *Cistus*, 479, i. — with the *Hippocistis*, 479, i. *Citrillus*, 293, ii. *Citreaum*, 293, ii. *Citron-tree*, 293, ii. *Citrul*, 293, ii. *Cives*, or *Chives*, 435, i. *Civet-Cat*, 534, i. *Clarification* described, 88, 89. *Clary*, *Æthiopian*, 209, i. — wild, and Purple-spiked, 342, ii. — 435, i.

I N D E X.

- Clay, 542, ii. — Tobacco-pipe, 558, i.
 Cleavers, 234, i.
 Climatis, 294, i.
 Clinopodium, 294, i.
 Cloves, Oil of, 762, ii. — 763, i.
 Clove-berry-tree, 289, ii.
 Clove-gilly-flowers, or Carnation, 280, i. ii. — Syrup of, 698, i.
 Club-moss, 362, i.
 Clysters, Decoction for, 689, ii.
 Comfrey, Syrup of, 703, i.
Crucis, 294, ii. — 295, i.
Crucium Aluminosum, 761, i.
 Coal, Pit, or Scotch, 552, i.
Cocciæ, Pills called, 726, ii.
Coccinilla, vid. *Cochinilla*, 503, i.
Coccus de Maldiva, 295, ii.
Coccus Polonicus, 502, ii.
Cocculus Indus, 295, ii.
 Cochineal, 503, i.
 Cochineal-tree, 389, i.
Cochinilla, 503, i.
 Cock, 508, i. — Moor, 486, i.
 Cockle, 381, i. — 524, i. — Bastard, 501, ii.
Cocklea, 503, ii.
Cochlearia, 296, i. ii.
 Cock's-head, 386, ii.
 Coco, or Cocoa-nut-tree, 393, i.
 Cod-fish, 484, ii.
 Caddy-moddy, 516, i.
 Coliac Passion, 312, i. — 314, i. — 316, ii. — 353, ii. — 361, ii. — 360, ii. — 507, i. — 516, i. — 560, i. — 567, i. — 571, i.
Colomas, 567, ii. ii.
Coffea, 297, i.
 Coffee-tree, 297, i.
Colchicum, 297, ii. — *Chionense*, 298, i.
 Cold, its Effects, 180, ii. — 181, ii. — 184, ii.
 Colds, common, 707, i.
 Coleworts, white, 258, i. — red, 259, i. — Sea, 477, i.
 Colliflower, 259, ii.
Colocynthis, 298, i. ii.
Coloquintida, 298, i. — the greater, ii. — Pills of, with Aloes, 727, i. — more simple, ib.
 Colt's-foot, 266, i. — 463, i.
 Columba, 503, ii.
 Columbines, 235, i.
Colurea, 298, ii. — 299, i. — 442, i. — 443, i. — 445, ii. — 476, ii. — 487, ii. — 490, ii. — 498, ii. — 506, ii. — 517, ii. — 518, ii. — 520, ii. — 534, ii. — 592, i. — 666, ii. — 792, i. ii. — 811, ii. — 812, i.
Conyza, 299, ii. — 479, i.
 Cook-fish, 519, ii.
 Coot, 508, i.
 Copper, 536, i. — Flowers of, 804, i.
Coracinus, 504, ii.
 Coral, white, 299, ii. — and black, 300, i.
Corallina, 299, ii.
 Coralline, Sea, 299, ii.
Corallum, 299, ii. — 300, i.
 Cordial, Confection, 716, ii. — Electuary, 719, i.
 Cordials, the frequent Use of, fatal, 169, i. — 170, ii.
Coris, 300, ii.
Coriandrum, (*Coriander*) 300, i.
 Cork-tree, 450, ii.
 Corn-machine Powder, 713, i.
 Cornelian, 589, ii.
 Corn-Rag, 326, ii.
Cornia, 504, ii.
 Corn-rose, 395, i. — Salad, 464, ii.
 Corns, 217, ii. — 228, i. — 256, i. — 426, ii. — 438, i. — 522, i. — 523, ii. — 525, ii. — 530, i. — 613, i.
Cornus, 300, ii.
Coronata, 300, ii.
Coronopus, 300, ii.
 Correction defecbed, 89, 90.
 Corrector of Matthews, 69, i.
 Corrosion of Ulcers, how produced, 61, ii.
Cortex Massey, 301, i. — *Winteranus*, ib. — *Peruvianus*, 349, i.
Corsuja, 301, ii.
Corvus, 504, ii.
Coryza, 17, i. — 245, ii.
Cos, 559, i.
 Cosmetics, excellent, 523, ii. — 561, i. — 540, ii. — 547, ii. — 551, i. — 567, ii. — 570, ii. — 589, ii. — 594, i. — 823, i. — 825, ii.
 Costiveness, to reduce, 145, ii. — to induce, 320, i. — to relax, 447, ii. — 589, i. — 691, ii. — 789, ii. — 795, ii.
 Cosmury, 247, ii.
Cosus, sweet, and bitter, 301, ii.
Cotinus,

I N D E X.

- Cotinus*, 301, ii.
 Cotton-bush, 256, i. — 328, ii.
Coturnix, 505, i.
 Cotyledon, 302, i.
 Counter-poison, 299, ii.
 Country-bells, 467, ii.
 Couhage, or Stinking Beans, 302, i.
 Coughs, how produced, 17, ii. — 38, ii. — to relieve, 138, ii. — 147, i. — 158, ii. — 207, i. — 208, ii. — 210, ii. — 214, ii. — 215, ii. — 216, ii. — 227, i. — 231, ii. — 237, ii. — 239, ii. — 240, ii. — 245, ii. — 250, i. — 251, ii. — 253, ii. — 256, ii. — 257, i. — 263, ii. — 266, i. — 274, ii. — 275, ii. — 279, ii. — 282, i. — 283, i. — 284, ii. — 304, i. — 308, ii. — 311, i. — 315, ii. — 316, ii. — 317, ii. — 327, ii. — 328, ii. — 333, ii. — 336, i. — 341, ii. — 343, i. — 344, i. — 346, i. ii. — 355, ii. — 359, i. — 361, ii. — 363, ii. — 367, ii. — 370, ii. — 375, ii. — 376, ii. — 385, ii. — 389, i. — 392, ii. — 394, ii. — 395, i. ii. — 397, i. — 398, i. — 399, ii. — 402, ii. — 417, i. — 425, i. ii. — 426, i. — 429, i. — 432, ii. — 434, i. — 435, i. — 437, ii. — 442, i. — 450, i. — 456, ii. — 460, i. — 463, i. ii. — 464, ii. — 465, i. — 466, i. — 467, ii. — 469, ii. — 470, i. ii. — 476, i. ii. — 501, i. — 503, i. — 505, i. — 507, i. ii. — 512, ii. — 518, i. — 530, ii. — 559, ii. — 585, i. — 593, i. — 595, i. — 621, ii. — 622, i. — 678, i. ii. — 705, i. — 714, ii. — 724, i. ii. — 729, ii. — 732, ii. — 734, ii.
 Cowslips, 395, ii. — great, 396, i.
 Cow-weed, 478, ii.
 Cow-wheat, 369, i. — wild, ib.
 Crab, Sea, 492, i. — River, ii.
Crabro, 505, i.
 Crabs-claws, compound Powder of, 712, i.
 Cra-fish, or *Crevin*, 485, ii.
 Cramp-fish, 532, ii.
 Cramps, 249, ii. — 274, i. — 275, ii. — 510, ii.
 Crane, 509, ii.
 Crane's-Bill, 324, ii. — mushroomed, and bloody, knotted-rooted, 325, i.
 Crangon, 505, i.
Cratægus, 302, i.
 Cream of Tartar, 613, ii.
Cremor Tartari, 784, ii.
 Cress, great, or sweet *Indian*, 477, ii.
 Cresses, Garden, 378, ii. — *Indian*, 379, i. — Meadow, 276, ii. — *Sciatica*, 480, i. — Swine's, 475, ii. — Water, 378, i. — 443, ii. — Winter, 250, ii.
Creta, 559, i. — 560, i.
 Cricket, 510, i. — Baulm, 502, i.
Cristbnum, 302, ii.
Crocodilus, (Crocodile) 505, i.
 Cross-wort, 304, ii.
Crocus sativus, 302, ii.
Crocus Martis aperiens, 814, i. — *Astringens*, ib. — *Antimonii*, vel *Metallosum*, 825, ii. — *Lotus*, ib. — *Metallosum mitior*, 826, i.
 Crow, Carrion, 504, ii.
 Crow-fish, 504, ii.
 Crow-foot, 324, ii. — upright Meadow, bulbous, and round-leaved Water, 415, ii. — Mountain, 416, i. — Water of Meadow, 634, i.
Cruciata, 304, ii.
 Crudities of the Stomach, 301, i. — 307, i. — 336, ii. — 345, i. — 348, i. — 354, ii. — 370, ii. — 442, i.
Cryſtalli Tartari, 784, ii.
 Crystallization described, 91, to 95, — its Use, 9, ii.
Cryſtallus, *Cryſtall*, 560, i.
Cubebæ, *Cubebæ*, 305, i.
Cuculus, 505, i.
Cucumis, 305, i.
 Cucumber, 305, i. — 312, ii.
 Cucumbers, wild, Juice of, 707, i.
Cucurbita, 305, i.
 Cuckow, 505, i.
 Cuckow-point, 239, i. — Compound Powder of, 711, i.
 Cudweed, common, 318, i. — golden, 479, ii.
Culitravarian, 479, ii.
Cuminum, 305, i.
 Cummin, *Ethiopian*, 224, ii. — wild, 305, i. ii. — horned, 343, ii. — Cataplasm, 760, i. — Plaster, 756, i. — Seeds, 762, i. — 763, i.
Cuscuta, 305, ii. — 306, i.
 Cuts, fresh, 243, ii. — 249, ii.
 Cutaneous Disorders, particular Remarks thereon, 197, — Eruptions, 239, i. — 266, i. — Alperities, ib. — 275, ii. — Disorders, 316, i. — 332, i. ii. — 352, ii. — 359, i. — 405, ii. — 434, i. — 445, i. — 466, i. — 469, i. — 475, i. — 491, ii. — 523, ii. — 535, i. — 572, i. — 593, ii. — 594, i. — 725, ii. — 747, i. — 753, i. — 816, i. — 819, i. — Infects, 823, i. — Disorders, 824, ii. — 828, ii.
 Cuttle-fish, 529, i. — *Cyanus*, 306, i.
 Cyclamen, 306, ii.
Cydonia, 306, ii.
Cygnus, 505, i.
 Cylian Plant, 370, ii.
Cynoglossa, 306, ii.
Cyperus, (round-rooted, and sweet) 307, i. — *Cypressus*, (Cypress-tree) 307, i. — *Cypbis*, Troches of, for *Mithridate*, 733, i.
Cyperus, long, and round-rooted, 307, i.
Cytisogenista, 307, ii.
Cytisus, 307, ii. — 308, i.

D.

- D Ace, or Dare, 516, ii.
 Daffodil, 265, ii. — common, 377, ii.
 Daisy, French, 327, ii. — common, 450, i.
 Dama, 505, ii.
 Dandalion, 309, i.
 Darnel, 360, i.
 Darts, to extract, 494, ii. — 522, i.
 Dart-wort, 426, i.
 Date-tree, 392, i. — drunken, 235, ii.
Daucus, 308, i. ii.
 Davil's-bit, 373, ii.
 Dauke, Mountain, 389, ii.
 Dead, to preserve, 670, ii.
 Deafness, 217, ii. — 280, i. — 294, ii. — 313, ii. — 370, ii. — 482, i. — 484, ii. — 493, i. — 508, i. — 510, i.
 Decoctions,

I N D E X.

- Decoctions, white, 688, ii.—
 compound, *ib.*—bitter, 689,
 i.—with *Senna*, *ib.*—Emol-
 lient, 690, i.—
Decoctum Album, 688, ii.—
Album Compositum, *ib.*—
Amarian, 689, i.—*cum*
Senna, *ib.*—*Commune pro*
Clystere, ii.—*Diascordii*, *ib.*
 —*Emollientis pro Ecui*, 690,
 i.—*ad Ictericos*, *ib.*—*Ligno-*
tum, *ib.*—*ad Nephriticos*, ii.—
 —*Nitrosum*, 691, i.—*Pecto-*
rale, *ib.*—*Tamarindorum cum*
Senna, ii.—
 Deer, Fallow, 505, ii.—
 Rain, 526, ii.—
 Defensive Plaster, 756, i.—
 Defluxions, 291, ii.—311, i.—
 —334, i.—570, ii.—743,
 ii.—
 Deliquiums, 16, ii.—23, ii.—
 —39, i.—165, i.—423, ii.—
 637, ii.—642, ii.—
 Deliriums, 272, i.—351, ii.—
 —421, i.—
 Delivery, to facilitate, 280, i.—
 —294, ii.—305, ii.—337, i.—
 —344, ii.—481, ii.—486, ii.—
 —498, ii.—511, ii.—516,
 i, ii.—After, 530, ii.—537,
 i.—559, ii.—643, i.—715,
 i.—764, ii.—Powder to
 promote, 711, i.—
 Delphinium, 303, ii.—
 Delphinus, 505, ii.—
 Dens Caninus, 308, ii.—*Leo-*
nis, 309, i.—
 Dentalium, 506, i.—
 Dentaria, 309, i.—
 Dentillaria, 309, i.—
 Deobstruent Pills, 727, ii.—
 Stimulating, *ib.*—with Steel,
 728, i.—
 Detonation described, 95.—
 Dew-berry, 422, ii.—
 Diabetes, 213, ii.—247, ii.—
 333, ii.—341, i.—657, i.—
Diacassia, 719, i.—
 Diacodion, Syrup of, 699, ii.—
 Diachylon, simple, 756, ii.—
 with Gums, *ib.*—
 Diamond, 536, i.—
 Diapalma, 757, i.—
 Diaphoretis, 278, ii.—501, i.—
 —504, i.—712, ii.—to ex-
 cite, 789, ii.—790, i.—
Diarrhea, 61, ii.—224, ii.—
 227, ii.—229, ii.—232, ii.—
 —241, i.—245, ii.—247,
 ii.—252, ii.—254, ii.—265,
 ii.—301, i.—302, i.—306, ii.—
 —311, i.—316, i.—329, i.—
 —336, ii.—343, ii.—(of
 Ireland, 363, i.)—365, i.—
 372, ii.—374, i.—375, ii.—
 381, ii.—382, ii.—383, i.—
 385, ii.—399, ii.—392, ii.—
 407, i.—419, i.—437, ii.—
 446, i.—450, ii.—451, ii.—
 459, ii.—464, ii.—468, i.—
 469, i, ii.—473, i.—488, i.—
 —497, ii.—498, i.—505,
 ii.—516, ii.—523, ii.—
 —530, ii.—541, ii.—560, i.—
 —571, i.—586, ii.—597, ii.—
 —599, ii.—619, i.—668, i.—
 —671, ii.—688, ii.—706, i.—
 —713, ii.—830, ii.—831, i.—
Diascordium, i, i.—its In-
 ventor, *ib.*—719, ii.—De-
 coction of, 689, ii.—
Distamnus, 309, i.—
 Digestion described, 96, 97.—
 Digestion, weak, to help, 140,
 ii.—145, ii.—202, ii.—205,
 i.—206, i.—266, ii.—277,
 i.—281, i.—302, ii.—
 322, ii.—326, i.—405, ii.—
 488, i.—505, ii.—507, i.—
 516, i.—589, i.—612, i.—
 618, ii.—660, i.—729, i.—
 790, ii.—792, ii.—818, ii.—
 Digestive, universal, 781, ii.—
Digitalis, 309, ii.—
 Dill, 230, i.—Seeds, Oil of,
 763, i.—Water of, 634, ii.—
Diospyrus, 479, ii.—
Diphyrges, 560, ii.—
Dipsacus, 309, ii.—310, i.—
 Dirt and Filth, to extract,
 569, ii.—
 Discautient Cataplasin, 760, i.—
 Diseases, epidemical, 19, ii.—
 —chronical, 20, ii.—264, ii.—
 259, i.—from hidden Causes,
 261, ii.—chronical, 267, i.—
 of all Kinds, 295, ii.—chro-
 nical, 376, ii.—malignant,
 402, i.—acute, 410, ii.—
 423, ii.—inflammatory,
 436, ii.—pulmonic, 465, ii.—
 —470, ii.—malignant, 498,
 i.—499, ii.—contagious,
 520, ii.—malignant, 596, i.—
 —acute, 614, i.—717, ii.—
 —chronical, 680, ii.—727, ii.—
 inveterate, 783, ii.—obsta-
 nate, 817, i.—chronical, 835, ii.—
 Dislocations, 646, ii.—
 Disorders acute, 272, i, ii.—
 malignant, 293, ii.—320, ii.—
 423, i.—pestilential, 435, ii.—
 —425, i.—malignant, 655,
 ii.—chronical, 729, ii.—ma-
 lignant, 790, ii.—chronical,
 818, ii.—828, ii.—
 Dispensatory, Reasons for
 publishing a new one, 33, ii.—
 4, i.——*sundry Faults in*
Quincy's described, *ib.*—
 Distempers, contagious, 270,
 i.—malignant, 280, ii.—
 —chronical, 284, ii.—336, ii.—
 —340, i.—345, i.—382, ii.—
 —acute, 528, ii.—malig-
 nant, 528, ii.—obstinate,
 574, i.—contagious, 595, ii.—
 —acute, 693, ii.—chro-
 nical, 706, i.—725, ii.—inflam-
 matory, 782, ii.—acute, *ib.*—
 inflammatory, 799, ii.—a-
 cute, 800, ii.—chronical,
 816, i.—824, ii.—826, i.—
 834, i.—
 Distillation described, 97, to
 99.—performed without
 Fire, 97, i.—what Bodies
 improper for it, *ib.*—dry,
 what, 98, i.—of the *Gold*
Still, ii.—*Alambic*, *ib.*—
Retort, 99, i.—*Reverbera-*
tory, ii.—the shortest Me-
 thod of learning the differ-
 ent Instruments and Ope-
 rations, as well as all others
 in *Chymistry*, *ib.*—
 Dittander, 356, i.—
 Dittany, 309, i.—Bastard,
 323, ii.—412, ii.—
 Diuretic Salt, 1730, i.—
 Diuretics enumerated, 158,
cf. seq.—a Caution, 160, i.—
 —those more safe, 161, i.—
 Dizziness, 279, ii.—505, ii.—
 Dock, sharp-pointed, 353, i.—
 Dodder, 305, ii.—*cf.* Thyme,
 306, i.—
 Dog, 492, ii.—
 Dog's-banel, 422, ii.—Stones, i
 433, i.—Tooth-Violet, 308,
 ii.—
 Dolphin, 505, i.—
Doria, 310, i.—
Doronicum, 310, i.—
 Double-tongue, 255, i.—
 Dove, 503, ii.—Ring, 523,
 ii.—Turtle, 533, i.—
 Dove's-foot, 325, i.—
Draba, 310, ii.—
Draca, 310, ii.—*Marinus*,
 506, i.—
Dracunculum, 311, i.—
Dracunculus major, 311, i.—
 Dragon-tree, 310, ii.—311, i.—
 Dragons, great, 311, i.—
 L 11 Dragon's-

1875

Dragon's-blood, 311, i.
 Dram-drinking, Causes there-
 of, 169. —very pernicious, 1
 611, ii. —629, i.
 Drank, 209, i. —261, ii.
 Drawing-Blister, 755, ii.
 Dead of Demons and Spi-
 rits, 554, ii.
 Dreams, frightful, to pre-
 vent, 545, i. —558, i.
 Drinking intemperat 201, ii.
 Dromedary, 492, i.
 Dropsies, 16, i. —39, i.
 —242, ii. —161, ii. —202, i.
 —203, i. —215, i. —217, i.
 —220, ii. —229, i. —230, ii.
 —234, ii. —235, ii. —236, ii.
 —240, i. —241, i, ii. —245,
 i. —248, i. —255, i, ii.
 —257, i. —258, i, ii. —260, i.
 —262, i. —269, ii. —270, i.
 —274, ii. —278, i. —286, i.
 —290, i. —294, ii. —296, i.
 —301, ii. —302, i. —305, ii.
 —306, i. —307, i, ii. —313,
 i, ii. —323, ii. —329, i.
 —332, ii. —335, ii. —339, i.
 —342, ii. —346, i. —347, i.
 —348, ii. —355, i. —358, ii.
 —368, ii. —372, i. —373, ii.
 —378, ii. —382, i. —389, ii.
 —394, ii. —396, ii. —401, ii.
 —419, i. —420, i. —426, i.
 —429, i. —435, i. —436, i.
 —442, i. —445, ii. —446, ii.
 —452, i. —457, ii. —461, i.
 —462, ii. —465, i. —466, i.
 —475, i. —482, i. —493, i.
 —494, ii. —497, ii. —503, i.
 —506, i, ii. —510, i. —512, i.
 ii. —518, ii. —542, ii. —560,
 i. —574, i. —629, ii. —638,
 i. —660, i. —675, i, ii.
 —677, i. —703, i. —731, ii.
 —821, ii. —828, i, ii. —884, i.
 —835, ii.
 Drop-wort, 318, i. Hemlock
 884, i. —Water, 825, i.
 Drowns, pretynatural
 279, i. —592, i. —621, i.
 Druggist, his Province, 336
 Dryopteris, 317, i.
 Duck, or Ducks, 424, i.
 wild, ib.
 Duck's-meat, 355, i.
 Dunder, 510, i.
 Duntrey, 446, ii.
 Dyer's-sweet, 324, i. —336, i.
 Dysentery, 210, i. —212, ii.
 —214, ii. —216, ii. —223, ii.
 —224, ii. —227, ii. —230,
 ii. —234, ii. —236, ii. —240,
 ii.

i. —241, i. —247, ii. —252,
ii. —255, i. ii. —256, i. 258, i.
247, ii. —262, i. —265, ii.
283, i. —284, i. —290, ii.
303, i. —307, ii. —316, ii.
318, ii. —320, ii. —321, ii.
341, ii. —343, ii. —344, i.
345, ii. —348, i. —352, i.
357, i. —359, ii. —361, ii.
369, i. —371, i. —372, ii.
374, i. —375, ii. —381, ii.
—382, ii. —383, i. —386, ii.
—390, ii. —392, ii. —399, ii.
—405, i. ii. —408, i. —409, i.
i. —411, i. —412, ii. —418, i.
—419, i. —420, i. —438, i.
—442, ii. —443, ii. —444, i.
—446, i. ii. —451, ii. —464, ii.
ii. —465, i. ii. —467, i.
469, i. ii. —473, i. —473, ii.
—479, i. —484, i. —486, ii.
—488, i. ii. —490, i. —epi-
demical, 491, ii. —492, ii.
498, i. —499, ii. —500, i. ii.
—503, ii. —504, ii. —507, i.
—509, ii. —512, ii. —513, ii.
—515, i. —519, ii. —522, i.
—523, ii. —recent, 529, ii.
—530, ii. —541, ii. —548, ii.
ii. —560, i. —570, i. —575, i.
i. —595, ii. —596, i. —597, i.
i. —619, i. —647, ii. —657, ii.
i. —668, i. —688, ii. —706, ii.
i. —718, ii. —749, ii. —818, ii.
i. —830, i. —831, i. —
835, ii.
Dysentery, Electuary against,
718, ii.
Dyspepsia, 287, ii. —385, i.
—323, i.
Dysuria, 355, i. —252, ii.
333, ii. —376, ii. —408, i.
517, i. —519, ii. —523, ii.
—835, ii.
—E.
E Apple, white, 125, i.
Ear-ach, 234, ii. —343, i.
493, ii. —516, ii. —527, ii.
—534, ii.
Ears, Disorders of, 83, ii.
186, i. —208, i. —226, ii.
241, ii. —311, ii. —344, i.
366, ii. —397, i. —417, ii.
421, i. —487, ii. —490, ii.
512, ii. —519, ii. —521, ii.
Ulcers of, 515, ii.
Earth described, 45, to 54
the Virgin Kind to procure
from Rain-water, 48, ii.
from Vegetables, 49, ii.

from Animals, 50, ii. —
Elementary, 51, i. — 52, —
a Mistake about this Kind,
53, i. — its Concurrence
with the other, ii. — great-
ly useful to Chymists, ib.
54, i. — a proper Distin-
ction between it and Sand, ib.
medicated and common, ii. —
Flax, 539, ii. — of *Chios*,
558, i. — *Flaxers*, ii. — of
Selinus, 560, i. — *Ere-*
trian, ii. — black, 583, ii. —
of *Sinope*, 586, ii. — *Ja-*
van's, 594, i. — of *Lem-*
nos, 595, i. — white, 596, i. —
of *Malta*, ib. — of *Nocera*,
Portugal, — *Samos*, — *Sicily*,
white and red sealed of *Tu-*
cany, sealed of *Livornia*, ib. —
of *Striga*, *Turkey*, 597, i. —
Earth-Worms, Oil of, 739, ii.
Eau de Carme, 643, ii. — *London*,
Eau d'Arquebuse, 646, i. —
Ebenus Aethiopica, 311, i. —
Ebony-tree, 311, 362.
Ebur, vid. *Elephas*, 506, ii.
Echinops, 301, ii. — 312, ii.
Echinus, 506, i. ii. — 312, ii.
Echium, 312, i. — 362, ii.
Edinburgh-tractate, 723, i. —
Eel, 482, i. — *Pout*, 542, ii.
Effervefcence or *Ebullition*,
described, 99, 100, —
what Bodies produce it,
100, i. — all do not depend
on Acids and Alkalies,
nor are accompanied with
Heat, ii.
Eft, Water, 515, ii. — 521
Egyptian Honey, 703, ii. —
Qintment, 745, i. —
Elaeagnus, 312, i. —
Elaeterium, 312, ii. — 707, i.
Elder, common, 428, ii. —
— Dwarf, 429, i. — *Mount-*
tain, ii. — Oil of, 739, ii. —
Ointment of, 752, i. —
Elder-berries, Rab of, 706, ii.
Elecampane, 336, ii. — *Roots*,
Extracts of, 771, ii.
Electuaries, Rules to make,
716, i. — if dry, how to
reduce, 724, i. —
Electaryum Antidysentericum,
718, ii. — *Baccis Lauri*,
ib. — *Cadiacum*, 719, i. —
de Caffa, ib. — *de Scedio*, ii. —
Liniacum, 720, i. — pro
Clyftero, ib. — *Pectorale*,
723, ii. — *Scammonio*, ib.
Elymi, Gum, Oil of, 769, i.
— i. — 327, ii. — *Elephant*,

INDEX

[illegible]

I N D E X.

Exulcerations, 332, ii.—415, ii.—493, i.
 Eye-bright, 316, i.—Water, 657, ii.—658, i.
 Eyes, Disorders of, 19, i.—83, ii.—146, ii.—147, i.—384, i.—185, i.—201, ii.—203, ii.—226, i.—227, ii.—236, i.—Webs of, 269, ii.—279, i.—270, ii.—274, i.—276, i.—290, i.—303, ii.—304, ii.—306, i.—307, i.—308, i.—311, ii.—314, ii.—316, i.—329, i.—333, ii.—342, ii.—343, i.—348, ii.—and Eyelids, 361, ii.—363, i.—364, ii.—365, i.—373, i.—376, ii.—386, i, ii.—391, i.—392, ii.—394, i.—407, i.—408, i.—412, i, ii.—417, ii.—421, i, ii.—431, ii.—442, ii.—461, i.—465, i.—469, i.—476, ii.—477, ii.—481, i.—Specks of, 484, ii.—Pearls, ib.—Films, 485, i.—Specks, 493, i.—*Albugo* and *Nyctalops*, 498, ii.—499, i.—501, i.—502, i.—Films, 503, ii.—508, ii.—510, i.—511, ii.—513, i.—516, i, ii.—517, i.—518, i, ii.—519, ii.—520, i.—Specks of, ii.—522, ii.—523, i.—524, i.—525, i.—526, ii.—protuberating, 527, ii.—528, i, ii.—532, i.—534, i.—555, ii.—564, i.—565, i.—567, i, ii.—Specks in, 568, i.—585, ii.—597, i.—599, ii.—(of Hor-les, 607, ii.)—625, ii.—658, i, ii.—744, i.—750, i.—750, ii.—753, ii.—807, ii.—Ointment for, 750, i.

F.

FABA, 316, i, ii.
 Face, to paint, 229, ii.—to cleanse from Scurf and Scars, 313, ii.—Rheums, 334, i.—from Spots, 359, ii.—Blemishes, 377, ii.—to clear, 409, i.—416, ii.—Redness of the, 437, i.—to make agreeably white, 485, i.—to clear from Spots, 490, i.—498, i.—500, i.—Spots, 504, i.—in red, 526, ii.—Tumours of, 534, ii.—547, i.—pimple, 657, ii.—Breakings out of, 219, i.
 Faces, to promote the Ex-cretion of, 509, i.

Fagopyrum, 316, ii.
Fagus, 316, ii.
 Falling-down of the *Uterus* or *Anus*, 345, i.—355, ii.—464, ii.
 Falling sickness, 265, ii.—441, i.—517, ii.—580, ii.—638, ii.—Powder against, 709, ii.
 Fall from high Places, 476, ii.
Fames Canina, 618, ii.
 Fats, Preparation of, 624, ii.
Fauces, Disorders of, 235, ii.—258, ii.—260, ii.—302, i.—334, ii.—336, ii.—357, ii.—371, i.—374, i.—380, i.—399, i.—407, i.—411, i.—421, i.—427, ii.—462, i.—Appetites of the, 467, i.—470, i.—495, ii.—505, i.—507, ii.—513, i.
Favor, 341, ii.
 Fears, nocturnal, 558, i.
 Febrifuge, 524, ii.
Felis, vid. *Catus*, 499, i.
 Fermentation described, 101 to 114.—all Vegetables not disposed to it, 101, i.—the different Classes of those that are, and how to be treated the first, ii.—102, 104, i.—106, i.—proper Ferments, 103, i, ii.—its Phenomena, 104, i.—its Parts distinguished, 105, i.—its supersisting Force and Effects, ii.—not yet accounted for in Chymistry, 106, i.—Circumstances necessary to it, ii.—Checks to it, 107, i.—the second Class, or Vinegar, 107, ii.—its Ferments and History of Generation, 108, i.—Sign of its being completed, ii.
 Fennel, *Fencl*, 319, i.—Flower, 381, i.—Giant, 317, i.—*Herba Frankincense*, 356, ii.—small, &c. 317, ii.—sweet, 319, i.—Water, ii.—Oil of, 762, ii.
 Fenugreek, 316, ii.
 Fern, common male, 318, ii.—female, ib.
 Ferret, 534, i.
Ferrum Equinum, 317, i.—vid. *Mars*, 570, ii.
Ferula, 317, i, ii.
 Fetid, volatile Spirit, 654, i.—Tincture, 666, i.—Pills, 728, i.
 Fevers, burning, whence a-

rise, 16, ii.—17, i.—in-
 flammatory, 17, ii.—Re-
 lapses of intermittent, ib.—
 putrid, 18, ii.—intermit-
 tent, 18, ii.—continued, 19, i.—burning, 22, ii.—34, ii.—
 malignant, 38, ii.—hectic, how produced, 39, i.—
 burning, 138, ii.—146, ii.—
 how continued, 150, ii.—
 intermittent, 201, i.—in-
 termittent, 202, i.—burn-
 ing, 205, i, ii.—epidemic, 207, i.—208, i.—with a
Diarrhoea, 227, ii.—inter-
 mittent, 231, ii.—235, i.—
 236, i.—237, ii.—239, i.—
 bilious, 240, ii.—intermit-
 tent, 241, i, ii.—malignant, 241, ii.—purple, 245, ii.—bilious and choleric, ab.—
 hectic, 246, i.—malignant, 248, ii.—250, ii.—
 251, i.—255, ii.—burn-
 ing, 256, ii.—continued, 258, ii.—intermitting, 262, i.—265, ii.—269, ii.—
 slow, ii.—malignant and pestilential, ib.—270, i.—
 acute, 272, i.—pestilential, ib.—continued, ib.—ma-
 lignant, ii.—intermittent, 273, i.—chronical, 275, ii.—
 pestilential, 280, ii.—its
Fomes, 281, i.—intermit-
 ting, 284, i.—286, i.—290, i.—
 continual and malig-
 nant, 291, i.—pestilential, 293, ii.—purple, 299, i.—
 intermittent, ib.—malignant and petechial, ii.—300, ii.—
 intermittent, 301, i.—attended with a *Diarrhoea*, 302, ii.—putrid and inverte-
 rate, 309, i.—malignant, 311, i.—319, i.—tertian, burning, 320, i.—intermit-
 tent, ii.—bilious, 329, i.—
 pestilential, 341, i.—inter-
 mittent, 349, ii.—*et seq.*—
 burning, 351, ii.—pesti-
 lential, 353, ii.—intermit-
 tent, 361, i.—366, ii.—
 putrid, 368, ii.—370, ii.—
 continued, 381, i.—burn-
 ing, 389, i.—bilious, 394, i.—
 395, i.—intermitting, 407, i.—putrid, 410, ii.—
 411, ii.—intermittent, 415, ii.—bilious, 420, i.—421, i.—
 hectic, 426, ii.—inter-
 mittent, 429, ii.—malignant,

I N D E X.

- nant, 434, i.—435, ii.—
 burning, 436, ii.—bilious,
 437, ii.—burning, 438, i.—
 spotted, ib.—epidemic, 440,
 447, ii.—continual,
 451, ii.—intermittent, 452,
 i.—459, i.—460, i.—
 burning, 463, ii.—tertian,
 465, i.—intermittent, 466,
 i.—malignant, 469, ii.—
 482, ii.—intermittent, 485,
 ii.—491, ii.—intermittent,
 492, ii.—putrid, 501, i.—
 petechial, 503, i.—505, i.—
 nocturnal, 506, i.—509, i.—
 511, ii.—519, ii.—523, i.—
 524, ii.—purple, 529, ii.—
 hectic, 532, ii.—petechial,
 533, ii.—putrid, 541, ii.—
 intermittent, ib.—con-
 tinual, ib.—intermittent,
 544, ii.—exanthematous,
 548, ii.—intermittent, 558,
 ii.—570, i.—intermittent,
 583, ii.—malignant, 586, ii.—
 597, ii.—617, ii.—con-
 tinual, 618, i.—intermit-
 tent, ib.—acute, 619, i.—
 purple, 647, ii.—654, i.—
 674, i.—ii.—intermittent,
 683, ii.—689, i.—691, i.—
 694, ii.—705, ii.—purple,
 744, i.—intermit. 751, i.—
 763, ii.—782, ii.—burning, 784
 i.—789, ii.—790, ii.—ma-
 lignant, 790, ii.—intermit-
 tent, 791, ii.—epidemic
 Camp, 800, i.—tertian,
 800, ii.—826, i.—828, i.—
 malignant, ib.—acute,
 835, i.—intermittent, 838, ii.—
 Feverfew, 368, i.—
 Fibres, to strengthen, 212, ii.—
 prevent the Rigidity of,
 251, ii.—332, ii.—364, i.—
 366, ii.—402, i.—410, ii.—
 428, i.—763, ii.—813, ii.—
 Ficedula, 367, ii.—
 Fleus, 317, ii.—318, i.—
 Fig-tree, 317, ii.—wild and
 Indian, ib.—Wort, 436, ii.—
 Filix, 318, ii.—
 Filtration described, 114.
 Filipendula, 318, i.—
 Fire described, 40 to 43.—
 Signs of it, 40, ii.—how
 produced and exists, 41, i.—
 causes different Extremes
 in Constitutions, 42, i.—No
 Body hath more of it than
 another, ib.—its Pabulum
 discussed, ii.—how it acts
 in Combustibles, 43, i.—
 Boerhaave's Conclusions, ii.—
 Observations thereon, 44,
 ii.—its Degrees, 45, i.—Ma-
 terials to produce them, 46,
 i.—Instruments and Means
 for augmenting it, ii.—Chy-
 mist's Methods for making
 its different Degrees, ib.—
 47, 48.—how its Force
 eluded, 115, i.—Stones,
 586, ii.—
 Fir-tree, 200, i.—ii.—201, i.—
 Fissula Lacrymalis, 466, i.—
 Fistulas, 307, i.—310, i.—
 343, ii.—398, i.—421, ii.—
 430, i.—468, i.—508, i.—
 510, i.—531, ii.—744, ii.—
 790, ii.—
 Fits, fainting, 208, ii.—
 257, i.—277, i.—280, ii.—
 354, i.—358, i.—370, ii.—
 382, ii.—539, ii.—641, ii.—
 642, ii.—644, i.—792, ii.—
 Five-fingers, 398, i.—
 Fixity (and Solidity) descri-
 bed, 114, 115.—on what
 it principally depends, 115, ii.—
 Flag, sweet, 207, i.—
 Filago, 318, i.—
 Flatulencies, 139, i.—151, i.—
 212, ii.—216, i.—of the
 Abdomen, 231, i.—of the
 Stomach, ib.—232, ii.—
 246, ii.—erratic, 252, i.—
 to discuss, 256, ii.—268, i.—
 ii.—276, ii.—282, ii.—
 287, i.—292, ii.—305, i.—
 310, ii.—345, i.—368, i.—
 376, ii.—377, ii.—379, ii.—
 382, ii.—389, i.—394, ii.—
 397, ii.—442, i.—452, i.—
 472, ii.—473, ii.—489, i.—
 498, ii.—505, ii.—523, i.—
 531, i.—619, i.—634, i.—
 641, ii.—653, ii.—686, ii.—
 718, ii.—729, ii.—756, ii.—
 Flax, 359, i.—purging, ii.—
 Flea-bane, blue, 479, i.—
 common, 299, ii.—greater,
 ib.—small, 465, ii.—small,
 true, 299, ii.—
 Fleus, to destroy, 220, i.—
 299, ii.—456, i.—461, ii.—
 475, ii.—
 Flesh, proud, to take down,
 675, ii.—701, i.—744, ii.—
 745, i.—746, ii.—what
 will increase it, ib.—to
 take away, 802, i.—
 Flies, Spanish, 403, i.—
 Flint, 589, ii.—
 Flit-weed, 446, i.—
 Florentine-orris, 346, i.—
 Flores Martialis, 804, ii.—
 Sulphuris, 807, ———
 Loni, ii.—Martis, 814, i.—
 Flus, 318, ii.—Sals, Am-
 moniac, 764, i.—
 Flower-de-luce, common,
 348, i.—Grass-leaved,
 346, ii.—
 Flower-gentle, 224, ii.—
 Flowers, the four Cordal,
 623, i.—
 Fluellen, Female, 465, ii.—
 Honey of, 704, i.—
 Fluidity, (and Solidity) de-
 scribed, 116, 117.—its Con-
 stituents, 116, i.—Pro-
 perties, ib.—117, i.—
 Solidity, 116, ii.—117, ii.—
 how the intestine Motion is
 increased, ib.—
 Fluor Albus, 151, ii.—
 200, ii.—420, ii.—431, ii.—
 432, ii.—442, ii.—469, i.—
 513, i.—517, i.—532, ii.—
 536, i.—548, ii.—565, ii.—
 583, ii.—592, i.—657, i.—
 670, ii.—676, ii.—813, ii.—
 208, ii.—214, i.—224, i.—
 232, ii.—236, i.—248, ii.—
 252, ii.—264, i.—268, ii.—
 318, i.—360, ii.—371, i.—
 373, i.—381, ii.—413, i.—
 Fluxes, how arise, 19, i.—34,
 i.—how checked, 135, i.—
 femoral to restrain, 141, i.—
 203, ii.—207, i.—Ute-
 rine, 224, ii.—gripping,
 227, i.—bloody, 336, i.—
 bilious, 240, ii.—Uterine,
 247, ii.—of all Kinds,
 254, i.—bloody, 255, ii.—
 280, i.—283, i.—of all
 Kinds, 284, ii.—292, i.—
 299, ii.—300, i.—of the
 Belly, 802, i.—of all
 Kinds, 302, ii.—306, ii.—
 307, i.—312, i.—of Blood,
 323, ii.—329, ii.—336, ii.—
 342, ii.—347, i.—355, ii.—
 of the Belly, 362, ii.—
 363, i.—371, i.—373, ii.—
 384, i.—of the Belly, 385, ii.—
 934, i.—395, i.—398, ii.—
 401, ii.—407, i.—408, ii.—
 411, ii.—412, i.—414, ii.—
 419, ii.—420, i.—421, i.—
 422, ii.—443, ii.—446, ii.—
 459, ii.—of the Belly,
 460, ii.—463, ii.—466, ii.—
 467, i.—469, ii.—471, ii.—

INDEX.

- of the Belly, 489, i.—
 499, ii.—500, i.—501, ii.—
 504, ii.—of the Belly, —
 508, ii.—515, ii.—531, i.—
 533, ii.—549, i.—of the
 Belly, —550, ii.—Uterine,
 560, i.—564, i.—Uterine,
 565, ii.—567, i.—590, i.—
 of the Belly, —595, i, ii.—
 596, ii.—597, i.—599, ii.—
 689, i.—690, i.—712, i.—
 744, i.
 Fluxions, 448, i.
 Fly, 322, i.
 Funiculum, 319, i, ii.
 Foetus, 319, ii.
 Foetus, to expel, 236, ii.—
 257, i.—268, ii.—270, i.—
 289, ii.—to preserve, 291, i.—
 to expel, 292, i.—306, ii.—
 309, ii.—322, ii.—353, ii.—
 359, i.—360, ii.—378, ii.—
 to revive, 382, ii.—to expel,
 386, ii.—389, ii.—to retain,
 392, ii.—to expel, 399, ii.—
 413, i.—423, ii.—426, i.—
 444, i.—485, i.—499, ii.—
 500, ii.—501, ii.—511, ii.—
 to strengthen, 514, ii.—
 to expel, 515, ii.—to re-
 tain, 526, ii.—to expel,
 638, i.—681, ii.—715, i.—
 Folly, 542, ii.
 Fomentation, common,
 695, i.
 Formica, 507, ii.—508, i.
 Fetus Communis, 695, i.
 Fox, 534, ii.
 Fox glove, 309, ii.
 Fractures, 208, ii.—376, ii.—
 408, ii.—430, i.—506, ii.—
 509, i.—525, ii.—570, ii.
 Fragaria, 320, i.
 Fragaria, 320, i, ii.
 Frankincense, 385, ii.
 Fraxinella, 320, ii.
 Fraxinus, 320, ii.
 Freckles, 207, i.—224, i.—
 226, ii.—228, i.—247, i.—
 313, ii.—316, i.—346, i.—
 348, ii.—352, ii.—475, i.—
 484, ii.—493, i.—504, i.—
 505, ii.—516, i.—519, ii.—
 528, i.
 Fretting the Skin, 747, i.
 Friars-cowl, 236, ii.
 Frog, common, 526, ii.—
 Tree, ib.
 Frog-bit, 374, i.
 Frog-spawn-water, 624, ii.
 Froth, or Foam of the Sea,
 561, ii.
 Fucus, 321, i.
 Fulica, 508, ii.
 Fuligo, 321, i.
 Fulmaria, 321, ii.
 Fumitory, 321, ii.—yel-
 low, ib.
 Fundament, Falling down
 of, 244, ii.—Ulcers and
 Chaps of, 356, ii.
 Fungus, 322, i.
 Furor Uterinus, 273, ii.
 Furz, lesser, 603, 324, i.
 Pusion, (and Liquidation)
 described, 118, 119, —
 how surprisingly promoted,
 118, ii, &c.
 G.
 GAGATES, 560, ii.
 Galanga, 322, ii.
 Galangal, great, and com-
 mon, 322, ii.
 Galbanum, 322, ii.—Gum;
 Oil of, 369, i.—Plant,
 317, i.—Preparation of,
 626, i.
 Galbula, 508, i.
 Galega, 323, i.
 Galeopsis, 323, i, ii.
 Galerita, vid. Alanda Cri-
 stata, 481, i.
 Galeni, 508, i.
 Gallina, 508, i.
 Gallinago, 509, i.
 Gallium, 323, ii.
 Gallus, 508, i.
 Gall-bladder, Obstructions
 of, —243, ii.—315, i.—
 511, ii.
 Galling, 500, ii.
 Gambooge, 334, ii.—Pills of,
 728, i.
 Gamboniam, see Gutta Cam-
 ba, 334, ii.
 Ganglions, 572, ii.—385, ii.—
 Gangrenes, 202, i.—215, ii.—
 250, i.—258, ii.—261, i.—
 303, ii.—323, ii.—337, ii.—
 351, ii.—360, ii.—401, i.—
 419, ii.—421, ii.—435, ii.—
 436, i.—438, i.—445, i.—
 470, ii.—478, ii.—489, ii.—
 510, i.—511, ii.—613, ii.—
 646, ii.—679, i.—786, i.—
 797, i.—799, i.
 Garbick, 216, i.—219, i, ii.
 Syrup of, —696, ii.
 Gargarism, 672, ii.
 Garum, vid. Eneraficholus,
 506, ii.
 Gas Sulphuris, 503, ii.
 Symplicis, 104, i.—113, i, ii.
 Gazella, vid. Bezoar, 486, i.
 Gelatina Berberorum, 705, ii.
 Cornu Cervi, ib. — seu Milva,
 Gylionorum, ib. — Ribesio-
 rum, 706, i.
 Genista, 323, ii.—324, i.
 Genital Organs, Weakness
 of, —414, ii.
 Gentian, 324, i.—Cross-
 wort, ib. — Marsh, Ba-
 stard, and Gentianel, ii.
 Gentiana, 324, i, ii.—Gen-
 tinella, ib.
 Gentian-Roots, Extract of,
 771, ii.
 Geranium, 324, ii.—325, i.
 Germanander, 285, i.—Ba-
 stard, 486, ii.—Golden,
 479, ii.—Tree, 453, ii.—
 Water, 435, ii.
 Germanander, Water, Species
 of, without Opium, 715, ii.—
 with, 716, i.
 Gilla, seu sal Vitriol, 804, i.
 Ginger, Syrup of, —703, ii.
 Gingidium, 325, i.
 Ginzeng, 325, ii.
 Girls, cachectic, 825, i.
 Gladiola, Water, 265, ii.
 Gladiolus, 326, ii.
 Glands of the Neck and Pan-
 ceas, 268, i.—indurated,
 822, ii.—Diseases of,
 824, ii.
 Glans Inguentum, 326, ii.
 Glass, its peculiar Property,
 115, i.—Muscovy, 567, ii.
 Glass-wort, 328, ii.—Albi-
 cant, 349, i.
 Glass, to extract, 515, ii.
 Glastrum, 327, i.
 Glauber's Salt, 798, ii.
 Glaucium, 327, i.
 Glauco, 327, i, ii.
 Glead, 520, i.
 Gleet and Strains, 250, i.—
 332, ii.—529, i.—664, i.—
 682, i.
 Elis, 529, ii.
 Globularia, 327, ii.
 Glossopetra, vid. Canis Car-
 charius, 493, i.
 Globuli, 509, ii.
 Glycerin, 328, ii.
 Gnaphadium, 328, i, ii.
 Gnats, to drive away, 299, ii.
 Goat, 497, i.—Bezoar,
 486, i.
 Goat-stomach, 433, i.—Beard,
 yellow, 460, i.
 Goat's - blood, Preparation
 of, —627, i.
 Goat's

I N D E X.

- Goat's-root, wild, 310, ii.—
 Rue, 323, i.—Thorn,
 334, ii.—
 Gobius, 509, ii.—
 Gold, 546, ii.—Mosaic,
 812, i, ii.—
 Gold-finch, 498, i.—
 Golden-Loops, 336, ii.—
 German, ib.—Oriental, 337,
 i.—Golden-rod, 463, i.—
 Gongorbeus, 351, ii.—234, ii.—
 248, i, ii.—265, ii.—
 272, ii.—282, ii.—307, ii.—
 320, ii.—329, ii.—332, ii.—
 343, i.—356, ii.—360, i.—
 371, i.—396, ii.—407, i.—
 423, ii.—452, ii.—453, ii.—
 463, i.—528, i.—541, ii.—
 592, i.—813, ii.—819, ii.—
 820, ii.—
 Goosefander, 519, i.—
 Goose, 482, i.—wild, ii.—
 Gooseberry-bush, 330, i.—
 Goose-foot, 399, ii.—Grass,
 234, i.—
 Gbr. cock, 483, ii.—
 Gossypium, 328, ii.—
 Gourd, 305, i.—
 Gouts, how induced, 17, ii.—
 —18, ii.—21, i.—61, ii.—
 to relieve, 128, i.—151, ii.—
 —171, ii.—200, i.—204, i.—
 —208, ii.—218, ii.—230, i.—
 —232, i.—237, i, ii.—241,
 i.—246, i.—248, i.—251,
 i.—254, ii.—257, i.—266, i.—
 —274, i.—282, i, ii.—
 285, ii.—286, i.—287, ii.—
 289, i.—290, ii.—296, i.—
 303, ii.—314, ii.—318, ii.—
 323, ii.—322, ii.—341, i.—
 347, ii.—355, ii.—359, ii.—
 368, ii.—374, i.—382, ii.—
 396, i.—397, i.—407, ii.—
 416, ii.—419, i.—428, i.—
 428, ii.—429, i.—435, ii.—
 436, ii.—437, i.—438, i.—
 443, i.—452, ii.—450, i, ii.—
 —457, i.—461, ii.—462, ii.—
 —466, i.—470, i.—475, ii.—
 484, ii.—485, i.—488, i.—
 499, i, ii.—499, ii.—500, i.—
 502, i.—508, i.—511, ii.—
 513, i.—517, i, ii.—520, i.—
 erratic, 524, i.—526, i.—
 528, ii.—531, ii.—532, i.—
 533, ii.—534, ii.—559, ii.—
 560, i.—563, i.—574, i.—
 605, ii.—620, ii.—637, ii.—
 642, ii.—668, ii.—676, ii.—
 682, i.—743, ii.—766, ii.—
 817, i.—828, ii.—
 Graculus, 509, ii.—
 Grain, oily, purging, 441, ii.—
 Grains of Paradise, 276, ii.—
 Gramen, 328, ii.—329, i.—
 Granata, 329, ii.—
 Gragatus, Granate, 561, i.—
 Grape-flower, Musk, 264, ii.—
 Grats, Brass, 334, ii.—Ca-
 nary, 400, ii.—Cock-foot,
 329, i.—Darnel, or Ray,
 360, i.—Knot, 352, ii.—
 Manna, 329, i.—of Para-
 nassus, ib.—Quick, 328, ii.—
 Reed, ib.—
 Grass-hopper, 517, i.—
 Grass-wrack, 475, i.—
 Gratiola, 329, ii.—
 Gravel, to expel, 203, ii.—
 209, i.—215, i.—225, ii.—
 227, ii.—229, ii.—244, ii.—
 252, i.—255, i.—277, ii.—
 282, i.—308, ii.—316, ii.—
 317, ii.—327, ii.—328, ii.—
 340, i.—372, ii.—380, ii.—
 409, i.—412, i.—445, ii.—
 447, ii.—453, i.—451, i.—
 505, i.—523, i.—530, ii.—
 568, ii.—580, ii.—696, ii.—
 —697, i.—
 Grayling, 484, ii.—
 Green Balsam, 744, ii.—Oil,
 739, ii.—Ointment, 749, ii.—
 Green-sickness, 208, ii.—270,
 i.—235, ii.—372, i.—375, ii.—
 Gripes, how produced, 61,
 ii.—cured, 150, ii.—206, ii.—
 210, i.—214, i.—220, ii.—
 227, i.—232, ii.—233, i.—
 235, i.—246, i, ii.—279, i.—
 ii.—282, ii.—283, i.—287,
 291, ii.—292, ii.—301, i.—
 317, ii.—315, ii.—353, ii.—
 372, ii.—377, i.—385, i.—
 399, i.—413, i.—441, i.—
 444, i.—452, i.—484, i.—
 500, i.—523, ii.—710, ii.—
 dry, 784, ii.—
 Grouse, Disorders of, 533, i.—
 Gromwell, 360, i.—
 Gressularia, 329, ii.—
 Ground-pine, 287, i.—Ira-
 lian, ii.—
 Groundsel, 314, ii.—
 Grunter, 534, i.—
 Gruel, 509, ii.—
 Gryllus, 510, i.—
 Guaiacum, 320, i.—332, ii.—
 Oil of, 769, ii.—
 Guaiacum-wood, Extract of,
 372, ii.—
 Gudgeon, 509, ii.—Sea, ib.—
 Gum Arabic, Senega, Sen-
 gal, 204, i.—Bdellium, 252,
 ii.—Gambanum, or Ferula,
 322, ii.—Guaiacum, volatile,
 Tincture of, 666, ii.—Lac-
 Tincture of, 668, i.—Am-
 moniac, Mixture of, 687, i.—
 Tragacanth, Lozenges of,
 709, ii.—Compound, cool-
 ing Powder of, 714, ii.—
 Elemi, Ointment of, 746, i.—
 Corn-pills, 728, ii.—
 Gummi, 332, ii.—Arabic,
 Ammoniac, 333, i.—Anise,
 Bdellium, Caradna, ii.—Ce-
 rasorum, Copal, Elemi, Guai-
 aci, Hederæ, Juniperi, Je-
 negalense, 334, i.—Tucana-
 bæcca, Tragacantha, ii.—Sa-
 pœnum, 426, i.—Gummi
 & Resina Abies, 774, i.—
 Gums exulcerated, 233, ii.—
 235, ii.—236, ii.—to streng-
 then, 254, i.—255, ii.—
 263, ii.—288, ii.—296, ii.—
 317, i.—357, ii.—361, ii.—
 362, i.—364, i.—370, i.—
 379, ii.—386, ii.—410, i.—
 411, ii.—421, ii.—422, ii.—
 460, i.—464, i.—468, i.—
 477, ii.—485, i.—528, i.—
 536, ii.—555, ii.—658, i.—
 665, ii.—668, ii.—296, ii.—
 Gutta Gamba, 334, ii.—
 Gutta Serena, 341, i.—
 Gysfium, 361, i.—
 Habit, to dry, 511, ii.—
 relaxed, 695, ii.—706,
 ii.—712, ii.—
 Hamamelis, 402, i.—451, i.—
 —469, ii.—470, i.—473, i.—
 —531, ii.—597, i.—
 Hemorrhages, 203, ii.—218,
 ii.—229, ii.—234, ii.—236,
 i.—247, ii.—(in Battle, 256,
 i.)—261, i.—272, ii.—286,
 i.—281, ii.—295, ii.—307, i.—
 311, i.—at the Nose, ii.—
 312, i.—314, ii.—318, ii.—
 322, i.—323, ii.—326,
 i.—327, i.—336, ii.—343,
 i, ii.—352, i.—53, ii.—
 356, ii.—362, ii.—373, i.—
 —376, ii.—381, i.—385,
 ii.—398, i, ii.—400, ii.—
 401, i.—409, i.—410, ii.—
 —411, i.—at the Nose,
 421, i.—422, ii.—426, i.—
 430, i.—of the Nose, 431,
 ii.—450, ii.—463, ii.—
 464, ii.—467, i.—internal,
 468, i.—

I N D E X.

468, i. — 469, i. — 470, i. ii.
 — 484, ii. — 485, i. — 489, i.
 — 490, i. — of the Nose,
 498, i. ii. — 499, ii. — 501,
 i. ii. — 503, i. ii. — 506, ii.
 — of recent Wounds, 508,
 ii. — 511, i. — of the Nose,
 512, i. — 516, ii. — 518, ii.
 — 522, i. — 523, ii. — 525,
 ii. — 526, i. — 538, i. — 547,
 i. — 555, ii. — 559, ii. — 561,
 i. ii. — 565, i. ii. — 570, i. ii.
 — 571, i. — 582, i. — 592, i.
 — 595, i. — 596, i. — 597, i.
 — 598, i. — 672, ii. — 674, i.
 — 744, ii.
Hæmorrhoids, blind, to help,
 151, ii. — 167, & seq.
 221, i. ii. — 247, ii. — 255,
 ii. — 261, i. — 265, ii. — 273,
 ii. — 277, ii. — 278, i. —
 304, i. — 316, ii. — 322, i.
 — 359, i. — 360, i. — 381, ii.
 392, i. — 402, i. — 407, i.
 — 424, i. — 437, i. — 441, i.
 — 445, i. ii. — 450, ii. —
 451, ii. — 464, ii. — 465, ii.
 — 467, i. — 470, i. — 480,
 ii. — 482, i. — 497, i. — 517,
 i. — 570, ii. — 638, i. —
 743, ii.
Hair, Disorders of; Baldness,
 208, i. — to make to grow,
 240, i. — yellow, 361, ii. —
 black, 422, ii. — to dye,
 429, ii. — to preserve, 460,
 ii. — to grow, 475, i. — 482,
 i. — to prevent its Falling-
 off, 491, ii. — to make to
 grow, 511, i. — to extir-
 pate, 516, ii. — falling off,
 522, ii. — to preserve, 525, i.
 — to prevent, ib. — to take
 off, 527, i. ii. — to make to
 grow, 528, ii. — of the Eye-
 lids, 532, i. — to eradicate,
 546, i. — to make black,
 557, ii. — to take off, ib. —
 to make grow, 559, i. —
 to extract, 568, ii.
Haleudo, vid. *Ispida*, 513, ii.
Halyconium, 561, ii.
Halec, 510, i.
Halimus, 335, ii.
Hands, to beautify, 27, i. —
 Fissures of, — 500, ii.
Hardnesses, 489, ii. — 512, ii. —
 537, ii. — 586, i. — 738, i. —
Hare, 516, i. — Sea, ii.
Hare-bells, 342, ii.
Hare's-Ear, 265, i. — Foot,
 461, i.

Harmala, 335, ii.
Hart's tongue, 358, ii.
Hartshorn-water, 647, i.
Hartshorn, Calcination of, —
 626, i. — Jelly of, — 705, ii.
Hasel, Wych, 470, i.
Haver-grass, 209, ii.
Hawk, sparrow, 481, i.
Hawk-weed, greater, 446, i. —
 lesser, 341, ii. — long-
 rooted, and *Hungarian*, —
 342, i. — greater, 446, i.
Hart-wort, *French*, 319, ii.
Shrub, 441, ii. — of *Can-*
dy, and *Italian*, ib. —
 common, 442, i.
Head, to prevent its Disor-
 ders, 173, ii. — 175, i. —
 182, ii. & seq. — 208, i. —
 210, ii. — Sores of, — 256, ii.
 Vermine and Sores of, —
 257, ii. — Distempers of
 the, — 277, i. — 280, ii. —
 285, ii. — 294, ii. — 305, i. —
 furfuraceous, 315, ii. —
 320, ii. — 322, ii. — 332, ii.
 333, ii. — phlegmatic,
 345, i. — to strengthen the,
 355, ii. — 358, i. — 363, ii. —
 Sores of the, — 378, ii. —
 Disorders of, — 385, ii. —
 421, ii. — 441, ii. — 448, ii. —
 457, ii. — *Furfa* of, 461, ii. —
 465, i. — 470, ii. — to
 strengthen, 477, i. — 491, ii. —
 492, ii. — Scurfy, 493, i. —
 495, ii. — 498, ii. — 504, ii. —
 Scurfy, 511, ii. — to
 purge, 512, ii. — 520, ii. —
 Scurfy, 522, i. — 539, ii. —
 542, ii. — 590, ii. — 665, i. —
 676, ii. — 683, i. — 684, i. —
 712, i. — 774, ii. — 834, i.
Head-ach, 39, i. — 173, i. —
 213, i. ii. — 217, ii. — 248,
 i. — 254, ii. — 255, ii. —
 265, ii. — 274, i. — 297, i. —
 317, ii. — 373, i. — 379,
 ii. — 421, i. — 431, i. — 466,
 i. — 476, ii. — 478, i. — 495,
 i. — 503, ii. — 523, ii. — 534,
 i. — 548, ii. — 582, i. — 548,
 ii. — 582, i. — 583, i. — 592, i.
 621, ii. — 660, i.
Healthful Tincture, 673, ii.
Hearing, 499, i. — 660, ii.
Heart-burn, 210, i. — 352, i.
 — 559, ii. — 686, ii. — 735,
 i. ii.
Heat, the Cause of almost
 every Change in Nature,
 109, i. — 117, ii. — 118, i. —

[Is a Body, 112, i. — pro-
 motes Putrefaction, 124, i.
 mechanic Laws of its Ge-
 neration, 176, i. — the
 greatest Degrees of it in a
 human Body, 179, ii. —
 its Effects farther explain-
 ed, 180, i. — its Source,
 183, i. — to excite, 700, i.
Heath, common, 314, ii.
Heath-peas, 390, i.
Heating Medicines, defined,
 177, i. — which are such,
 ib. — when necessary, 178,
 i. — a Caution, ii. — how
 their Use directed, 179, i. —
 — perform the Offices of o-
 thers, ii.
Heats, febrile, 245, ii. —
 259, i. — 261, i. — 284, ii.
 — of the lower Belly, 290,
 i. — feverish, 299, i. — pre-
 ternat, 312, i. — excels, 319, i. —
 febrile, 390, i. — 391, ii. —
 426, ii. — preternatural, 431,
 i. — 445, ii. — 457, i. — fe-
 brile, 469, ii. — 510, i. —
 532, i. — feverish, 532, ii. —
 579, ii. — Immoderate,
 581, i. — innate, 622, i. —
 febrile, 672, ii. — 700, i. —
 766, i.
Heart, 208, i. — to corrobo-
 rate, 254, i. — 257, i. —
 284, ii. — 292, i. — 298, ii. —
 421, ii. — 431, i. — 456,
 ii. — 469, ii. — 477, i. —
 499, ii. — 514, ii. — 520, ii. —
 528, ii. — 562, i. — 589,
 ii. — 792, i.
Heart's-Ease, 467, ii.
Hætic Disorders, what Air
 best for them, 21, i. — 258,
 i. — 267, i. — 356, ii. — 421,
 i. — 497, i. — 655, ii. — 663,
 i. — 714, ii.
Hedra, 336, i.
Hedge-hog, 506, ii. — Sea, i.
Hedychroon, Troches, called
 the Mafs, 733, i.
Hedysarum, 336, i.
Helianthemum, 336, ii.
Helonium, 336, ii.
Helicbryssum, 336, ii. —
 337, i.
Helicbryssum, 479, ii.
Heliotropum, 337, ii. — (*He-*
liotrope) 561, ii.
Hellebore, Bastard, 337, ii.
 — 412, ii. — black, 338, ii.
 — Extract of the Roots of,
 771, ii. — Tincture of, 666, ii.
 white,

I N D E X.

- white, 337, ii.—Tincture of, 678, i.—Honey of, 704, i.
- Helleborine*, 337, ii.
- Helleborus*, 337, ii.—338, ii.—340, i.
- Helvine*, 479, ii.
- Hemicantha*, 217, ii.—238, ii.—265, ii.—289, i.—294, ii.—379, ii.—494, ii.—503, ii.—535, i.
- Hemionitis*, 340, ii.
- Hemitritæus*, putrid, 579, ii.
- Hemlock*, 290, ii.—great broad-leav'd, 442, i.—Water, 401, i.
- Hemlock-plaister*, with Gum Ammoniac, 756, i.
- Hemp*, 274, ii.
- Hen*, 508, i.—common, Water, or Moor, ib.
- Henbane*, 342, ii.—white, 343, i.
- Hepar Sulphuris*, 808, ii.
- Hepatica*, 340, ii.
- Hepatic Disorders*, 321, ii.—392, ii.—516, ii.—518, i.—519, ii.—534, ii.
- Herba Vulneraria*, 479, ii.—Paris, 341, i.
- Herbs*, the five emollient, 623, i.
- Herb-terrible*, 223, ii.—Paris, 341, i.—Frankincense, 353, i.
- Hermodyctylus*, 341, i.
- Hermodyctyls*, 298, i.—341, i.
- Herniaria*, 341, ii.
- Hernia's*, 247, ii.—256, ii.—264, ii.—284, i.—307, ii.—341, i.—373, i.—390, i.—398, i.—430, i.—448, i.—451, i.—452, ii.—463, ii.—500, i.—506, ii.—537, ii.—569, ii.
- Heron*, 484, ii.
- Herpes*, 261, i.—339, i.—348, ii.—361, ii.—376, ii.—385, i.—Miliaris, 401, ii.—449, i.—526, ii.—534, ii.—555, ii.—607, ii.
- Herring*, 510, i.
- Hesperis*, 341, ii.
- Hickups*, 224, i.—305, ii.—306, ii.—347, i.—371, i.—376, ii.—382, ii.—687, i.
- Hieracium*, 341, ii.—342, i.
- Hiera Picra*, 715, i.—Powder of, 714, ii.—Tincture of, 672, ii.
- Hippocampus*, 510, i.
- Hippocastanum*, 342, i.
- Hippolitus*, vid. *Equus*, 507, i.
- Hippophaes*, 342, i.
- Hippopotamus*, 510, ii.
- Hips*, Conserve of, 708, ii.
- Hips*, Pains of, 479, ii.—510, i.
- Hircus*, vid. *Caper*, 497, i.
- Hirudo*, 510, ii.
- Hirundo*, 510, ii.—511, i.
- Hoarseness*, how produced, 17, ii.—to cure, 209, ii.—217, ii.—227, i.—258, i.—305, i.—328, i.—333, ii.—334, ii.—352, i.—364, i.—375, ii.—392, ii.—395, i.—413, i.—417, i.—450, i.
- Hobgoblin's-claw*, 583, ii.
- Hog*, 525, i.
- Hogs-fennel*, 400, i.
- Holly-rose*, male, and female, 479, i.—tree, 212, i.
- Homo*, 511, i.
- Honesty*, or Sattin, 264, ii.
- Hone-wort*, 438, i.
- Honey and Water*, their good Effect, 252, ii.
- Honey*, Clarification of, 626, i.
- Honeys*, 703, i. & seq.
- Honey-suckle*, 275, ii.—French, 336.
- Hoope*, 534, i.
- Hops*, 361, i.
- Hordeum*, 342, i.—479, ii.
- Horehound*, Water, 362, ii.—white, 367, i.—black, ii.—bale, 448, i.
- Horminum*, 342, i, ii.
- Hornet*, 505, i.
- Horse*, 507, i.—Sea, ii.—510, i.—River, ii.
- Horie-radish*, 206, i.—compound Water of, 645, ii.
- Horse-tail*, Shrub, 314, i.—female, and great, ib.—Corn, ii.
- Horses*, broken-winded, 342, i.—founder'd, 438, i.
- Hound-fish*, 508, i.
- Hound's-tongue*, 306, ii.
- Houfe-leek*, 437, ii.—small, 438, i.
- Humours*, choleric and ferous, 420, ii.—426, i.—444, ii.—459, i.
- Hungary-water*, 646, i.
- Hurts*, inward, 530, ii.
- Hyacinthus*, 342, ii.—(Hyacinth) 561, ii.
- Hydragogue*, 667, i.—707, ii.
- Hydrocele*, 252, i.—262, ii.
- Hydrophobia*, 301, i.
- Hysocyamus*, 342, ii.—343, i.
- Hypocotum*, 343, i.
- Hypericum*, 343, ii.
- Hypochondria*, Distentions of the, 139, i.—Distorders of the, 234, ii.—306, i.—380, i.
- Hypochondria*, 145, ii.—212, ii.—267, i.—268, i.—278, ii.—282, ii.—290, i.—333, i.—339, i.—346, ii.—360, i.—366, ii.—390, i.—417, i.—436, ii.—443, i.—448, ii.—561, i.—571, i.—581, i.—592, i.—605, ii.—619, ii.—637, ii.—651, ii.—653, ii.—670, i.—677, i.—710, ii.—763, ii.—784, i.—789, i.
- Hypocistis*, 343, ii.
- Hyslop*, 343, ii.—Hedge, 329, ii.—Oil of, 762, i.
- Hyslopus*, 343, ii.
- Hysterics*, 207, i.—212, ii.—216, i.—237, ii.—240, ii.—245, ii.—246, i.—256, i.—257, i.—273, i, ii.—277, i.—282, ii.—283, i.—287, i.—308, i, ii.—322, ii.—323, i.—333, ii.—341, i.—346, ii.—352, i, ii.—367, ii.—368, i.—370, i.—371, i.—378, ii.—379, ii.—399, ii.—416, ii.—429, i.—446, i.—448, ii.—452, ii.—455, ii.—482, ii.—485, ii.—488, i.—499, i, ii.—502, ii.—507, i.—508, i.—524, i.—561, i.—581, i.—583, ii.—592, i.—593, i.—605, ii.—637, ii.—638, i.—650, ii.—653, ii.—670, i.—677, i.—681, ii.—686, ii.—687, i.—710, ii.—728, i.—733, ii.—755, ii.—763, ii.—764, i.—789, ii.—790, i.—811, ii.
- Hystrix*, 512, ii.

I.

J *Acæa*, 344, i.

Jacobæa, 344, i.—480, i.

Jacob's Ladder, 408, i.

Jack-by-the-Hedge, 215, ii.

Jack-daw, 520, i.

Jalap, 344, i.—Extract of, 771, ii.—Refin of, 774, i.—Tincture of, 667, i.—Compound, ii.

Jalapium, 344, i.

M m m Japan

I N D E X.

- Japan-Earth*, Tincture of, 667, ii.—Troches of, 734, ii.
Jasper, 562, i.
Jasminum, 344, ii.
Jaspis, 562, i.
Jaffemy, white, 344, ii.
Jaundice, 208, ii.—211, i.—220, ii.—234, ii.—235, i.—236, ii.—241, ii.—243, ii.—244, i, ii.—245, i.—248, i.—254, i, ii.—257, i.—262, i.—265, i.—269, ii.—270, i.—277, i.—279, i.—284, i.—287, i.—288, i.—289, ii.—290, i, ii.—291, i.—296, i.—299, ii.—302, ii.—306, i.—313, i.—314, ii.—315, i.—318, ii.—319, i.—320, i.—321, ii.—324, ii.—329, ii.—336, ii.—341, i, ii.—342, ii.—347, i.—348, i.—352, ii.—353, i.—355, ii.—356, ii.—358, ii.—361, i.—363, ii.—367, i, ii.—374, i.—380, i.—382, i.—394, ii.—401, ii.—413, i.—421, ii.—422, i.—436, i.—black, 452, i.—454, i.—460, ii.—463, ii.—465, i.—476, ii.—yellow, 478, ii.—482, i.—486, ii.—492, ii.—497, ii.—498, i.—501, i.—504, ii.—506, ii.—508, ii.—511, i, ii.—513, i.—517, ii.—519, ii.—523, ii.—524, ii.—527, ii.—619, ii.—675, i, ii.—731, ii.—741, ii.—742, ii.—784, i.—834, i.—Decoction for, 690, i.
Ikeris, 480, i.
Ilex, 513, i.
Ichneumon, 513, i.
Ichorous Excrements, 363, ii.—517, i.
Ichthyocola, 513, i.
Icteric Disorders, 305, ii.—670, i.
Jellies, 705, ii. & seq.
Jet, 560, ii.
Jews-ear, 247, i.
Ignis Persicus, 492, ii.
Ilex, 344, ii.
Iliac Passion, 230, ii.—368, ii.—399, i.—498, i.—574, i.
Imperatoria, 344, ii.
Impetigo's, 226, ii.—327, i.—346, i.—348, ii.—386, i.—399, i.—528, ii.—531, i, ii.
Impetus, febrile, 423, i.—429, i.
Impoſthumations, internal, 251, ii.—external, 258, ii.—272, i.—295, i.—462, i.—485, i.—inward, 530, ii.
Impotence, to remove, 525, ii.
Incorporation deſcribed, 119, 120.—See Menſtruums, 74, &c.
Indicum, 345, i.
Indigo, blue, 345, i.
Inflammations, 146, ii.—147, i.—internal, 151, ii.—their Cauſe, 184, ii.—to relieve, 185, i.—206, i.—external, 251, i.—265, ii.—271, ii.—273, ii.—274, ii.—275, ii.—internal, 283, i.—external, 284, i.—both, 319, ii.—external, 320, ii.—of all Kinds, 321, i.—344, i.—355, ii.—363, i.—369, i.—371, i.—378, i.—384, i.—395, ii.—399, i.—400, i.—407, i.—408, i.—410, i.—417, ii.—423, ii.—429, i.—438, i.—445, i.—446, i.—449, i.—457, i.—460, i.—463, i.—475, ii.—484, i.—489, i, ii.—503, i.—526, ii.—581, ii.—585, i.—612, ii.—613, i.—658, i.—712, i.—808, ii.—813, ii.
Inflations, 260, i.—347, i.—512, ii.
Infuſi Sennæ Unciæ quatuor, 692, ii.
Infuſions, bitter, 691, ii.—ſimple, 692, i.—with Senna, ib.—Purging, ib.
Infuſum Amarum, 691, ii.—cum Senna, 692, i.—ſimple, ib.—purgans, ib.—Sennæ commune, ib.—Lim-niatum, ib.
Injectiōns, to be uſed with great Caution, 194, i.
Ink, 219, ii.
Infects, to baniſh, 256, i.—299, ii.
Inſenſibility, to produce, 567, i.
Inteſtines, Tone of the, 140, i.—208, ii.—214, i.—215, i.—245, ii.—258, i.—279, i.—280, i.—286, ii.—305, ii.—345, ii.—346, i.—364, i.—375, ii.—391, i.—410, ii.—418, ii.—447, ii.—452, ii.—461, i, ii.—462, i.—482, i.—488, i.—499, ii.—571, i.—589, ii.—596, i.—619, i.—713, i.—740, ii.—782, ii.—784, i.—811, i.
Intoxication, to prevent, 219, i.—226, ii.
Job's-tears, 351, ii.
St. John's-wort, Baſtard, 300, ii.—343, ii.—Oil of, 739, ii.
Joints, Diſorders of, 150, i.—203, ii.—208, ii.—236, ii.—238, ii.—274, i, ii.—276, i.—282, i.—298, i.—310, i.—313, ii.—318, i.—322, i.—332, i.—333, ii.—377, ii.—379, ii.—392, ii.—396, i.—456, ii.—461, i.—490, i.—499, i.—502, i.—505, i.—518, i, ii.—522, i.—525, ii.—532, i, ii.—535, i.
Ipecacuanba, 345, i.—Tincture of, 667, ii.—Wine, 668, i.
Ipecacuana, Baſtard, 412, ii.
Iris, 346, i, ii.
Iron, 570, ii.
Iron-ſlings, Preparation of, 626, i.
Iron, in Spirit of Salt, Tincture of, 669, i.—candied, 707, ii.—Ley of, 866, ii.—ſoluble, 513, ii.—opening Saffron of, 814, i.—aſtringent, ib.—Salt of, ib.—Flowers of, 815, i.
Iron-wort, *Achilles's*, 373, i.—442, i.—common, German, and ſmooth-leaved, ib.
Iſchiadic Pains, 208, ii.—232, i.—241, i.—319, ii.—336, ii.—408, i.—416, ii.—444, ii.—455, ii.—470, i.—513, i.
Iſinglaſs-fiſh, 513, i.
Iſpida, 513, ii.
Iſſues, to make, 789, ii.
Itch, how produced, 61, ii.—to relieve, 138, ii.—244, i.—255, i.—267, i.—299, ii.—306, i.—316, ii.—321, ii.—327, i.—336, ii.—338, ii.—341, i.—348, ii.—353, i.—356, ii.—361, i.—363, ii.—279, i.—409, i.—411, i.—416, ii.—434, i.—452, i.—454, i.—475, i.—485, i.—493, i.—494, i.—524, ii.

I N D E X.

—524, i. —526, ii. —tumid,
528, i. —541, ii. —607, ii.
—658, i. —792, ii. —819,
i. —829, i. —Ointment for,
745, ii. —with Mercury,
ib.
Itchings, 348, ii. —452, i. —
493, i. —525, ii.
Jububa, 346, ii.
Jubube-tree, 346, ii. —great,
ib.
Judæicus Lapis, 562, i.
Judas's Tree, 442, ii.
Juices, 706, i. & seg.
Julepum è Camphora, 686, i.
—è Creta, ib. —è Moscho,
ib.
Julus, 513, ii.
Julus, 513, ii.
Juncus, 347, i.
Juniper-berries, Oil of, 763, i.
Juniper-tree, 347, ii. —black,
348, i. —Draf, ii.
Juniperus, 347, ii. —348, i,
ii.
Juniper-water, comp. 644, i.
—simple, 638, i.
Jus Viperinum, 695, i.
Ivy, 336, i. —Ground, ib.

K.

K Ali, 348, ii. —349, i.
Keeling, 484, ii.
Kello, 585, ii.
Kermes, 513, ii. —Berries, ib.
—yrup of, 699, i. —Mi-
neralis sive Pnlvis Car-
thusianorum, (Kermes's Mi-
neral) 834, ii.
Kibes, 302, i.
Kidney-beans, 400, ii. —Ita-
lian, ib. — Vetch, Sea,
234, i.
Kidneys, Exulcerations of
the, 150, ii. —what may
be hurtful to them, 207,
ii. —Disorders of, 215, i. —
223, i. —227, i. —229, i. —
234, i, ii. —236, i. —248,
i, ii. —256, ii. —257, i. —
258, i. —268, ii. —272, i. —
282, i, ii. —287, ii. —314,
i. —327, i. —336, i, ii. —
341, i. —346, ii. —347, ii.
—348, ii. —360, i. —372,
ii. —384, i. —394, i, ii. —
396, ii. —400, i. —417, i. —
430, i. —435, i. —451, i. —
453, i. —463, i. —467, ii. —
470, i. —477, ii. —485, i,
—492, ii. —517, ii. —519,
ii. —524, ii. —528, i.

530, ii. —533, i. —567, i. —
621, i. —789, ii. —809, ii.
Kina-kina, 349, i.
King's-Evil, 289, i. —309,
i. —314, ii. —323, i. —
346, ii. —448, i. —463, i.
—824, ii.
King's-fisher, 513, ii. —
Spear, 243, ii.
King-stone, 531, i.
Kite, 520, i.
Kite-fish, 520, i.
Knapweed, 344, i. —Silver,
ib.
Knewel, 351, i. —Polonian,
409, i. —502, ii.
Knits, 493, i.
Knot-graft, common, 409,
i.

L.

L Abour, difficult, 235, i.
—237, ii. —256, i. —
267, i. —276, i. —277, i. —
304, i. —367, i. —499, ii.
—512, ii. —515, i. —537,
i. —567, ii. —572, ii.
Laburnum, 480, i.
Lac Ammoniaci, 687, i. —
Sulphuris, 809, i.
Lacca-tree, 346, ii.
Lacertus, 515, ii.
Lacryma Jobi, 351, ii.
Lack, French, 219, ii.
Laeluca, 351, ii. —352, i.
Ladanum, 351, i.
Lady's-finger, 234, i. —Man-
tie, 214, i. —Smock, 276,
ii. —Traces, triple, 433, ii.
Lake-weed, 399, i.
Lamb, Scythian, or Tartar-
ian, 474, ii.
Lamium, 352, i, ii.
Lampfana, 352, ii.
Lampetra, 515, ii.
Lamprey, 515, ii.
Langour, 430, i. —495, ii.
—641, ii. —677, i.
Lapathum, 352, ii. —353, i.
Lapis Armenus, 562, ii. —
Asius, ib. —Bononiensis, Bu-
fonites, 563, i. —Galafrites,
564, i. —Geodes, Hamatit-
es, ii. —Hibernicus, Lazu-
li, 565, ii. —Lyntis, 546,
ii. —Melitites, Memphites,
566, ii. —Moroclitus, Ne-
phriticus, Phrygius, Schi-
stus, 567, i. —Specularis,
Spongia, ii. —Thyites, &
Variolatum, 568, i. —La-
zuli, (Preparation of) 626, i.

—Calaminaris, (Ointment
of) 746, ii. —(Cerate of)
ib. —Medicamentofus, 806,
ii.
Lapwing, 533, i.
Larcephagus, 562, ii.
Larch-tree, 210, ii.
Lark, crested, 481, i. —Sky,
ii.
Lark-spur, 308, ii.
Larius, 516, ii.
Laserpittum, 353, i, ii.
Laserwort, 353, ii.
Lathyrus, 353, ii.
Lavender-Cotton, 201, ii. —
Sea, 252, ii. —greater, 353,
ii. —common, 354, i. —
French, 448, i.
Lavender, simple and com-
pound, Spirit of, 649, i. —
Oil of, 762, i. —763, i.
Lavendula, 353, ii.
Laudanum, Liquid, Tincture
of, 671, i.
Laurel, 354, i. —of Alexan-
dria, 355, i.
Lauocerasus, 354, i.
Laurus, 354, ii. —355, i.
Leucanthemum, 356, i.
Lead, 585, i. —black, ii. —
red, 813, i. —Sugar of, ib.
—white, ii. —Ointment of,
752, ii. —Plaster of Red,
758, i. —simple, ib. —with
Soap, ib. —Troches of Red,
733, ii.
Lead-wort, 309, i. —408, i.
Leaves, Indian, 364, i.
Leech, 510, ii.
Leeks, 410, i. —Vine, ib. —
wild, 219, ii.
Legislature, their Wisdom,
in properly dividing the
Provinces of Physick, 2, i,
ii.
Lemon-Juice, Syrup of, 699,
i. —Peel, Oil of, 762, ii. —
Water of, 637, ii. —Tree,
358, ii.
Lenticula, 355, i.
Lentigo, 508, i.
Lentiscus, 355, ii.
Lens, 355, i.
Leo, 516, i.
Leontopetalon, 355, ii. —
356, i.
Leontopodium, 356, i.
Leopardus, vid. Pardus, (Le-
opard) 523, ii.
Leopard's-bane, 310, i. —
416, i. —German, 476, ii. —
lefter, ib. —creeping, ii.
M m m 2 Lepidium,

I N D E X.

- Lepidium*, 356, i.
Lepra, 260, ii.—491, ii.—508, i.
Leprosies, 207, ii.—(in Hogs, 244, i.)—251, i.—434, i.—491, ii.—504, i.—505, ii.—506, i.—519, ii.—524, i.—531, i.—532, i.—533, ii.—792, ii.—833, i.
Lepus, 516, ii.
Lethargy, to help, 143, i.—237, i.—297, i.—338, i.—353, ii.—354, i.—368, i.—394, ii.—414, i.—423, ii.—441, i.—448, ii.—494, ii.—499, i.—583, i.—621, ii.—642, ii.—707, i.—764, i.—789, ii.—790, i.—792, ii.
Lettuce, Garden, 351, ii.—wild, and jagged-leaved, 352, i.—Lamb's, 464, i.
Leuca's, 356, i.
Leuciscus, 516, ii.
Leucium, 356, i.
Levissimum, 356, ii.
Leucoplegmatia, 202, i.—428, i.—669, i.—670, i.
Lues Venerea, 427, i.—431, i, ii.—436, i.—439, i.—445, i.—818, i.
Libanotis, 356, ii.—480, i.
Lice, 295, i.—315, ii.—349, i.—456, i.—475, ii.—493, i.
Lichen, 356, ii.—357, i.—477, i.—malignant, 491, ii.—524, i.
Lienteries, 216, ii.—265, ii.—316, i.—343, ii.—392, ii.—473, i.—509, ii.—512, ii.—571, i.—637, ii.
Life, in what it principally consists, 152, i.—155, ii.—how restored, 165, ii.—preserved, 178, ii.—prolonged, 326, i.—480, i.—670, ii.—679, ii.—808, ii.
Life, Tree of, 455, ii.
Lignum, 357, i, ii.
Lignificum. See *Levissimum*.
Ligustrum, 357, ii.
Lilium, 358, i.
Lilly, white, red, and of the Valley, 358, i.—384, i.
Limax, 516, ii.—terrestris, vid. *Cochlea*, 503, i.
Limbs, Weariness of, 238, ii.—Pains of, 240, i.—to strengthen, 248, i.—251, i.—287, ii.—310, ii.—316, i.—353, ii.—359, i.—419, i.—benumbed, 516, i.—to strengthen, 549, i.—Rigidity of, 795, ii.—fun-dry Disorders of, 811, ii.
Lime, 551, ii.—Quick, ib.—Water, 656, ii.
Lime-tree, 457, i.—smaller, ib.
Limonia Malus, 358, i.
Limonium, 358, ii.
Limpin, 532, i.
Linaria, 358, ii.—517, i.
Linctus, or *Elegma*, what, 120, ii.—583, i.
Linctus, 120, i.
Liniment of Artæus, 746, i.—three Ingredients, 754, i.
Linimentum Saponaceum, 742, ii.—Album, 754, i.—Tri-pharmacum, ib.—Volatile, ib.
Linifive Electuary, 720, i.—for Clysters, ib.
Linnet, common, 517, i.
Lingua Cervina, 358, ii.
Linseed-oil, Lohoch of, 724, ii.—how used.
Lintels, Sea, 321, i.—common, 355, i.—blackish.
Linum, 359, i, ii.
Lion, 516, i.
Lion's-foot, 318, i.—328, i.
Lipothymy, 280, i.—431, i.
Lippitude, 510, ii.
Lips, Disorders of the, 317, i.—361, ii.—408, i.—795, ii.
Liquamen Salis Tartari, 777, i.
Liquiritia. See *Gbeirchiza*, 327, ii.
Liquor Mineralis Anodynus Hoffmanni, 803, i.
Liquorice, 327, ii.—tough-headed, 415, i.—Extract of, 771, ii.—Juice of, 706, i.—to cure.
Liubanthrax, 552, i.
Litharge, 568, i.—Preparation of, 626, i.—Vinegar, 659, ii.—to cure.
Lithargyrus, 568, i.—384, ii.
Litbecolla, 568, ii.
Lithontriptic Disorders, 320, i, ii.—351, ii.—420, ii.—443, ii.—485, ii.—509, i.—586, i.
Lithospermum, 360, i.
Liver, Disorders of, 208, ii.—210, i.—215, i.—234, ii.—243, ii.—244, i.—248, i.—256, ii.—257, i.—to recruit, 264, i.—inflamed, 272, i.—275, ii.—276, ii.—280, i.—284, i.—287, ii.—288, i.—290, i, ii.—300, i.—302, i.—306, i.—307, ii.—313, i.—315, i.—319, i.—320, i.—321, ii.—324, i, ii.—327, i.—333, i.—336, ii.—337, i.—341, i.—347, i.—349, i.—356, ii.—361, i.—363, ii.—367, i.—378, i.—383, ii.—389, ii.—417, i.—435, i, ii.—441, i.—442, i.—453, ii.—460, ii.—463, ii.—465, i.—469, ii.—488, i.—503, i.—511, ii.—519, ii.—527, ii.—547, i.—619, i, ii.—792, ii.—835, i.
Liver-wort, 340, ii.—356, ii.—Tree, ib.—Ground, 357, i.—Star, ib.
Lixivium Tartari, 777, ii.—Saponarium, 786, ii.—Martis, 806, ii.
Lizard, 515, ii.—green, ib.
Load-stone, 568, ii.
Lobster, 485, i.
Lochia, Fluxes of, to stop, 255, i.—to promote, 257, i.—268, ii.—304, i.—to restrain, 318, i.—to provoke, 321, ii.—to stop, 345, i.—to promote, 354, i.—367, i.—368, i.—370, ii.—375, ii.—391, ii.—423, ii.—to check, 464, ii.—582, i.—to promote, ii.—to restrain, 647, ii.—to excite, 733, ii.
Locusta, 517, i.
Log-wood, 357, i.—Extract of, 772, i.—384, ii.
Lohoch ex Amyla, 724, i.—Commune, ii.—Diarrhæa-canthi, ib.—de Lino, ib.—de Maana, 725, i.—Saponaceum, ib.—de Spermate Cely, ii.—to cure.
Lohochs, 724, i.—common, ii.—(with the compound Powder of Gum-dragon, ib.)
Loins, Pains of, 270, i.—312, i.—525, ii.—533, ii.
Lolium, 360, ii.—to cure.
Lonebitis, 360, ii.—to cure.
Longevity, to procure, 499, ii.
Looseness, Dysentery, Diarrhæa, how arise, 19, i.—

I N D E X.

- 34, i. — 61, ii. — helped, — 507, i. — 511, i. — 523, *Malva*, 364, i, ii.
 151, i. — 202, i. — 203, i. — 348, i. — *Malka*, 364, ii. — 365, i.
 — 207, i. — 236, i. — 244, *Man*, 511, i.
 ii. — 289, ii. — 300, ii. — *Mansu*, 518, ii.
 355, i. — 360, i. — 391, ii. *Mandragn*, 365, i.
 — 392, i. — 399, ii. — 402, *Mandake*, 365, i.
 i. — 409, ii. — 418, ii. — *Mango-tree*, 365, ii.
 422, ii. — 442, ii. — 455, i. *Maniack*, 228, ii. — 372, i. —
 — 488, ii. — 498, i. — 338, i, ii. — 343, ii. — 497,
 531, i. — 539, ii. — ii. — 520, ii. — 407, ii. —
Latro Saponacea, 639, i. 520, ii. — 525, i. — 678, i.
Lotus, 360, i, ii. — *Manga*, 365, ii.
Lovage, 356, ii. — *Mange*, of Horses, 540, ii.
Love Apples, 225, ii. — *Manna*, 363, ii. — *Loboch* of,
Loufe, 524, ii. — *Wall*, 502, 725, i.
 i. — *Many-feet*, 527, ii. — *Sea*,
Loufe-bur, 251, i. — ib.
Lucatelli's Balsam, 740, i. *Maple*, 474, i. — great, ib.
Lucius, 517, i. — *Marble*, white, 570, ii.
Ludus Paracelsi, 568, ii. — *Mare*, 507, i.
Luluja. See *Acetofella*, 205, *Marga*, 570, i, ii.
 i, ii. — *Marjoram*, sweet, 363, i. —
Lumbrius, 517, ii. — *Pot*, wild, gentle, or peren-
Lunaria, 360, ii. — nial, ii. — *Bastard*, 389, ii. —
Lungs, Infarctions of, 238, *Goat's*, 460, i. — *Spanish*,
 ii. — Disorders of, 239, ii. — ib. — *Oil* of, 762, i, ii. —
 248, ii. — 250, i. — 251, i, 763, i.
 ii. — 253, ii. — 257, i, ii. — *Mariscæ*, 236, i.
 278, ii. — 279, i. — 282, i. *Marks of the Face*, 225, i.
 — 303, i. — 318, i. — 324, ii. — 328, ii. — 484, ii.
 — 326, i. — 328, ii. — 333, i. *Marle*, 570, i. — white, ib. —
 — 336, i. — 337, ii. — 342, i. ash-coloured, and reddish,
 — 344, i. — 346, i, ii. — ii. — red, 586, i.
 347, ii. — 363, ii. — 364, i. *Marmor Album*, 570, ii.
 — 365, i. — 367, i. — 369, i. *Mars*, 570, ii. — *Saccharatus*,
 — 372, ii. — 375, ii. — 378, 707, ii. — *Solubilis*, seu *Cba-*
 ii. — 379, i. — 381, ii. — *lyls*, *Tartaratus*, 813, ii. —
 383, ii. — 389, ii. — 395, i. — *Sulphuratus*, 814, i.
 — 399, i. — 402, i. — 411, i. *Marjao*, 256, ii.
 — 413, ii. — 417, i. — 425, *Marshmallows*, Ointments
 i. — 433, ii. — 435, i, ii. of, 748, ii. — *Syrup* of,
 442, i. — 447, ii. — 451, i. 696, ii.
 — 452, ii. — 456, ii. — 460, *Martagon*, 358, i.
 ii. — 463, i. — 468, i. — *Martial Flowers*, 804, ii. —
 469, ii. — 498, i. — 503, i. Tincture of, 669, i.
 — 513, i. — 517, ii. — 534, *Marth*, black, 484, i. —
 ii. — 565, ii. — 560, ii. — Sand, 511, i.
 592, i. — 597, i. — 797, i. — *Marubium*, 367, i, ii.
 807, i. — 809, i, ii. — *Marvel of Peru*, 37, i.
Lung-wort, Tree, 374, ii. — *Marum*, 367, ii.
French, or *Golden*, 413, ii. *Marygold*, Garden, 269, ii.
Lupinus, (*Lupines*), 360, ii. — Wild, and *Marth*, 270, i.
 — wild, ib. — 391, i. — *Corn*, 478, ii.
Lupulus, 360, ii. — *Master-wort*, black, 244, ii.
Lupus, 518, i. — 344, ii.
Luscinia, 518, i. — *Massich-tree*, 355, ii. —
Lutra, 518, i. — *Herb*, 367, ii. — *Syrian*, ib.
Luteola, 361, i. — *Massiche*. See *Lentiscus*,
Lutes described, 129, to 355, ii.
 131. *Mater Perlarum*, 518, ii.
Laixations, 208, ii. — 223, i. *Marfellon*, 344, i.
 — 273, ii. — 361, i. — 376, ii. *Matricaria*, 368, i.

Matrix,

I N D E X.

- Matrix*, Obstructions of, 257, i.—Inflammation of, 356, i.—368, i.—376, ii.—*Matthews's Pills*, 729, ii.—731, i.—*Maturing Cataplasm*, 760, ii.—*Mause*, 522, i.—*Rell*, 509, ii.—*Mavis*, 533, i.—*Mays*. See *Triticum Indicum*, 462, i.—*May-weed*, 287, i.—*Meadow-pink*, 238, i.—sweet, 469, ii.—*Measles*, 235, i.—245, ii.—255, ii.—304, i.—317, ii.—319, i.—323, i.—423, ii.—434, i.—436, ii.—501, i.—512, ii.—513, ii.—618, i.—647, ii.—835, i.—*Measures*, 624, ii.—*Mecacoxbitt*, 368, ii.—*Mechoacana* (*Mechoacan*, white) 368, ii.—*Micomium*, 368, ii.—*Medica*, 368, ii.—*Medic-fodder*, 368, ii.—*Medicinal-Stone*, 806, ii.—*Medicines compounded pre-judicial*, i, i, ii.—their great Uncertainty, ib.—their Operation in general, 132—classified, 133, i, ii.—*Medium*, 369, i.—*Medlar-tree*, 372, i.—*Neapolitan*, ii.—*Megrims*, 313, i.—399, i.—792, i.—*Mel Aegyptiacum*, 703, ii.—*Elatines*, 704, i.—*Helleboratum*, ib.—*Mercuriale*, ib.—*Rosaceum*, ii.—*Solutivum*, ii.—*Melampyrum*, 369, i.—*Melancholy*, whence produced, 17, i.—18, ii.—what relieves it, 20, ii.—129, i.—to help, 143, i.—244, ii.—257, i.—260, i.—267, i.—303, ii.—306, i.—335, ii.—338, i, ii.—370, i.—376, ii.—411, i.—436, ii.—458, i.—460, ii.—497, ii.—503, ii.—506, ii.—523, i.—525, i.—542, ii.—554, ii.—558, ii.—561, ii.—565, ii.—569, i.—660, ii.—*Melanteria*, vid. *Chalcitis*, 557, ii.—*Melanthium*, 369, i.—*Melanurus*, 519, i.—*Meleagris*, 519, i.—*Melilot*, 369, ii.—*Plaster*, 755, ii.—*Melilotus*, 369, ii.—370, i.—*Melissa*, 370, i, ii.—*Melo*, 370, ii.—*Melon*, *Musk*, 370, ii.—*Water*, 293, ii.—*Memory*, 228, i.—283, i.—316, i.—510, ii.—542, ii.—*Menses* (*Monthly Terms*) irregular, to help, 140, i.—165, i.—167, & seq.—206, ii.—207, i.—208, ii.—to promote, 208, ii.—211, i.—to restrain, 214, i.—to promote, 216, ii.—217, ii.—225, i, ii.—to stop, 228, ii.—to promote, 234, i.—to restrain, 236, i.—to excite, ii.—238, i.—239, i.—241, ii.—243, i.—244, i.—251, i.—restrain, 252, ii.—255, ii.—256, i.—to promote, ib.—to restrain, ii.—to provoke, ib.—257, i.—to stop, 261, i.—to provoke, 262, i.—263, i.—to restrain, 265, ii.—to provoke, 268, ii.—269, i, ii.—270, i.—276, ii.—277, i.—278, ii.—284, i.—to restrain, ib.—to excite, 286, ii.—287, ii.—289, i, ii.—292, i.—294, ii.—299, ii.—300, ii.—301, i.—to restrain, 302, i.—to promote, 304, ii.—304, i.—305, ii.—306, ii.—307, i.—308, i, ii.—310, ii.—to stop, 312, i.—to provoke, 313, ii.—to restrain, 314, ii.—to provoke, 314, i, ii.—316, ii.—to stop, ib.—318, i.—to provoke, 319, i, ii.—321, ii.—322, ii.—to stop, 327, i.—to promote, 333, i.—336, ii.—337, i.—339, i.—to restrain, 343, i, ii.—to promote, 346, i.—to restrain, 347, i.—to promote, ib. ii.—to restrain, 353, i.—to provoke, ii.—354, ii.—355, i.—356, i, ii.—to stop, 360, i, ii.—to promote, ib.—361, i.—to stop, ii.—362, ii.—to provoke, 363, i.—to restrain, 364, ii.—to provoke, 368, i.—369, i.—to stop, ib.—to promote, 370, ii.—371, i.—372, ii.—to stop, 374, i.—to promote, 375, ii.—376, i, ii.—378, i, ii.—381, i.—to restrain, 384, i.—to provoke, 389, ii.—391, ii.—to stop, 392, ii.—398, i.—to provoke, 399, ii.—400, ii.—402, i.—to stop, 402, ii.—to provoke, 410, i.—to check, 410, ii.—413, i.—420, ii.—to provoke, 423, ii.—424, i.—426, i.—427, ii.—429, i.—431, i.—432, ii.—433, ii.—435, i.—436, i, ii.—440, ii.—441, i, ii.—442, i.—444, ii.—to stop, 446, i.—to provoke, 448, i, ii.—452, i.—454, i.—455, i.—456, i, ii.—457, i.—460, ii.—to check, 464, ii.—to provoke, 468, ii.—473, i.—476, ii.—477, ii.—478, i.—479, ii.—480, ii.—482, i.—to check, ii.—to promote, 486, ii.—488, i.—to check, 490, i.—to provoke, 491, ii.—497, ii.—499, i.—500, i, ii.—501, i.—512, ii.—to restrain, ib.—514, ii.—to promote, 517, ii.—to check, 521, ii.—to promote, 522, i.—528, i.—545, i.—565, ii.—570, i.—571, i.—to check, 582, i.—to promote, ii.—to check, 583, ii.—to promote, 584, ii.—592, i.—595, i.—596, i.—638, i.—672, ii.—727, ii.—733, ii.—743, i.—to check, ib.—to promote, 764, i.—789, ii.—*Menstruums* described, 74 to 85— which are called solid, 74, i.—the first Class of the fluid Kind is Water, 75— what Bodies always dissolvable by it, 76, 77.—Oils the next Class, 77, i.—78, 79.—Spirituuous, 79, ii.—Alcaline and Acid, 80, i.—Simple-saline, ii.—fixed alkaline, 81, i.—volatile, ib.—acid, ii.—of neutral Salts, 82, i.—of pure dry Salt, mixed Fossils and sublimed, ib.—of Sea-salt, Sal-gemmae, and Fountain-salt, ii.—of common Nitre, ib.—the saline Kind variously produced, 83, i.—of fixed Alkalies, with fossil Acids, obtained by Fire, ii.—of pure Salts with other Salts, ib.—of Menstruum with Menstruum, 84, i.—divers Inferences

I N D E X.

- Terences from the foregoing
 Premises, ib. ii. — 85, 86.
Mentastrum, 370, ii.
Mentha, 370, ii. — 371, i, ii.
Mercurial Cerate, 759, ii. —
 Ointment, 748, i. — Plaf-
 ter, 755, i. — red Corro-
 sive, 820, ii. — yellow Eme-
 tic, 821, i.
Mercurialis, 371, ii. — 372, i.
Mercurii Solutio, 815, i. —
 Calx, 816, i.
Mercurius, 571, ii. — *Calci-
 natus*, 816, i. — *Præparatus
 per se*, ib. — *Animatus So-
 laris*, ib. — *Præparatus Al-
 bus*, 818, ii. — *Dulcis*,
 ib. — *Fuscus*, vulg. Wurtz,
 ib. — *Calcinatus*, vulg. *Præ-
 cipitatus ruber*, ib. — *Corro-
 sivus ruber*, 820, ii. — *Cor-
 ralinus*, ib. — *Præcipitatus
 Viridi*, ib. — *Emeticus fla-
 vus*, 821, i. — *Sublimatus
 viridis*, 822, i. — *Corro-
 sivus Sublimatus vel Albus*,
 ii. — *Sublimatus dulcis*, 823,
 i. — *Saccharatus*, 825, i. —
Alcalisatus, ib. — — *Vitæ*,
 832, ii.
Mercury, 571, ii. — Chil-
 dren's, 372, i. — 401, i. —
 Dog's, 372, i. — *Englib*,
 ib. — 256, ii. — *French*, 371,
 ii. — its bad Effects, to re-
 move, 560, i.
Mercury, Honey of, 704, i.
 — Pills of, 726, i. — laxa-
 tive, ii. — precipitated, Oint-
 ment of, 749, i. — anima-
 ted Solar, 816, i. — white
 Precipitate of, 818, ii. —
 dulcified, — 819, ii. — red —
 819, ii. — green — 820, ii. —
Corralline, 820, ii. — corro-
 sive, Sublimate, 822, i. —
 white, ii. — sweet, 823, i. —
 — *Panaced* of, 823, ii. —
 Sugared, 825, i. — *Alcali-
 sed*, 825, i.
Mefcus, 519, i.
Merops, 519, ii.
Merula, 519, ii.
Mefentery, Obstructions of
 the, 276, ii. — 321, ii. —
 393, i.
Mefpilus, 372, i, ii.
 Metalline Minerals, Prepa-
 rations of, 815, i.
 Metals, their Fusion, how
 produced, 115, ii. — how
 precipitated, 120, 122, i,
 ii. — how separated from
 their Ores, 125, i. — Pre-
 paration of, 811, i. — mil-
 der *Crocus* of, 826, i.
Meum, 372, ii.
Mexico — seeds, 420, i.
Mezereon, 456, i.
Milium, 372, ii. — *Solis*, 373,
 i. See *Lithospermum*, 360, i.
 Milk coagulated, 73, i. —
 216, ii. — 222, ii. — to in-
 crease, 230, ii. — to pre-
 cure, 232, ii. — to diminish,
 335, i. — to increase, 256, i.
 — to prevent its Coagula-
 tion, 258, ii. — to increase,
 279, ii. — what will coagu-
 late it, 291, i. — to in-
 crease, 327, ii. — 335, ii. —
 363, ii. — 369, i. — 381, i.
 — to dry away, 407, ii. —
 to increase, 408, ii. — 417,
 ii. — 465, i. — to prevent
 Curdling, 484, i. — to in-
 crease, 517, ii. — 554, ii. —
 560, i. — 564, ii. — to pre-
 serve, 608, i.
 Milk-waft, 244, i. — wort,
 327, ii. — 408, ii. — *Veteli*,
 ib.
Millefolium, 373, i.
Millegrana. See *Herniaria*,
 341, ii.
Millepedes, 519, ii. — Prepa-
 ration of, 626, i. — Wine
 of, 686, i.
 Millet, 372, ii. — *Indian*,
 446, ii.
 Mill-mountain, 359, ii.
Milvus, 520, i.
 Mind, to render cheerful,
 302, ii. — tranquil, 583, i.
 609, i.
 Minerals, 535, to 600. —
 Chymical Preparations of,
 795, i.
Mindererus's Spirit, 654, i.
Minium, 813, i.
 Mint, Horse, 370, ii. —
 371, ii. — round-leaved, ib.
 — Spear, 370, i. — Water,
 371, i. — 637, ii. — crisped,
 or curled, red, and Pepper,
 ii. — Oil of, 762, i. — 763,
 i. — Tincture of, 670, i.
Mirabilia Peruviana, 373, i.
Mixedrum, 484, ii.
 Miscarriages, 229, ii. — 255,
 ii. — 422, ii. — 444, ii. —
 515, i. — 536, i. — 589, ii.
 Miffel, and Miffeltoe, 468,
 ii.
 Mify, 557, i.
 Mithridate, or *Democrate's*
 Confection, 720, ii. — 721,
 i. — Troches for, 733, i.
Mitbridatum, *five Confectio*
Democratis, 720, ii. — *Da-
 moeratis*, 721, i.
Mæna, 518, ii.
 Mole, to exterminate, 511,
 ii. — 516, i.
 Mole, 531, ii.
 Mollugo, 373, ii.
Moly Diofcoridis, and *Theo-
 phrafti*. See *Allium*, 219, ii.
Molybdæna, 585, i.
Molydidena. See *Dentilla-
 ria*, 309, i.
Momordica. See *Balsamina*,
 247, ii.
Monedula, 520, i.
 Money-wort, 381, ii.
 Monk-fish, 531, i.
 Monk's-hood, 206, ii. —
 Rhubarb, Baffard, and true,
 352, ii.
Monoceros, 520, i.
Monophyllon, 373, ii.
 Moon-wort, 360, ii.
 Moor-berries, 391, ii.
Morphew, 313, ii. — 531, ii.
Morfus, *Diaboli*, 373, ii. —
Gallina, see *Alfina*, 222, i. —
Rana, 374, i.
 Mortifications, to stop, 74, i. —
 292, i. — 351, ii.
Merus, 374, i.
 Mofch-feed, 476, ii.
Mofchus, 520, i.
 Moss, Hairy Tree, 374, ii. —
 Sea, ib. — Cup, 375, i. —
 of a dead Man's Skull,
 470, ii.
Motacilla, 521, ii.
 Mother-of-pearl, 518, ii. —
 Wort, 277, i.
 Moths, to expel, 479, i.
 Moufe, Mountain, 522, i. —
 Shrew, ib. — Ear, 401, ii. —
 Flitter, 533, i. — Tail,
 375, i.
 Mouth inflamed, 213, i. —
 Ulcers of the, 213, ii. —
 235, ii. — 246, ii. — 250, ii. —
 255, ii. — 260, ii. — 261, ii. —
 264, ii. — 288, ii. — 302, i. —
 322, i. — 329, ii. — 344, i. —
 451, ii. — 376, ii. — 386, i. —
 401, ii. — 411, i. — 412, i. —
 421, i. — 422, ii. — 427, ii. —
 459, ii. — 460, i. — 461, ii. —
 463, i. — 464, i. — 518, ii. —
 547, i. — 668, ii.

I N D E X.

Moxa, 374, i.
Mucilages, Oil of, 739, i, ii. —
 Plaster of, 758, ii.
Mucilago, Seminum Cydonio-
rum, 695, ii.
Mugil, 521, ii.
Mug - wort, fine-leaved,
 201, ii. — 238, i. — *Cbi-*
nesse, 374, i. — Syrup of,
 697, i.
Mulberry-tree, 374, i.
Mule, 521, ii.
Mules-fern, 340, ii.
Mullein, 464, ii. — with
 white Flowers, and black,
 465, i. — Moth, 477, i.
Mullet, 521, ii. — lesser, ib.
Mullus, 521, ii.
Mulus, 521, ii.
Mumia, vid. *Homo*, 511, i.
Mummy, 522, i.
Murrain in Cattie, 340, i.
Mus, 522, i.
Musa, 374, ii.
Musca, 522, i.
Muscari, see *Bulbus Vomit.*
 264, ii.
Muscipula, 374, ii.
Muscle, 522, ii.
Muscles, Disorders of, 208, ii.
Muscosities of the Stomach,
 341, ii.
Mushroom, 322, i. — great
 dusty, and Scarlet, ib.
Musk, 520, ii. — Julep,
 686, ii.
Mustard, *Arabian*, 310, ii. —
 Hedge, 315, ii. — com-
 mon, 442, ii. — white,
 443, ii. — Treacle, 455, ii. —
 Mithridate, ib. — Tower,
 462, ii.
Mustela, 522, i.
Mustelus-spinax, vid. *Galeus*,
 508, i.
Mutellina, see *Meum*, 372, ii.
Myagrum, see *Alyssum*, 223, ii. —
 224, i.
Myosurus, 375, ii.
Myrica, see *Tamariscus*,
 452, i.
Myrmecia, 416, i.
Myrobalans, 371, i. — (*My-*
robalans)
Myrrh, 375, ii. — Com-
 pound Powder of, 715, i. —
 Troches of, 733, ii. —
 Tincture of, 670, ii. —
 with Aloes, ib. — Com-
 pound Elixir of, 681, i.
Myrrba, 375, ii.
Myrrbis, 376, i, ii.

Myrtle, or Gaul, *Dutch*,
 312, i. — common, 376, ii. —
 Syrup of, 699, i.
Myrtus, 376, ii. — *Braban-*
tica, see *Elæagnus*, 312, i.
Mytilus, 522, ii.

N.

Nails of the Toes, 613, i.
Napellus, see *Aconi-*
tum, 206, ii.
Naphtha, 574, ii.
Napus, 377, i.
Narcissus, 377, ii. — *Luteus*,
 see *Bulbocodrum*, 264, ii.
Nardus, 377, ii. — 378, i.
Nasturtium, 378, i, ii. —
 379, i.
Natron, 111, ii. — 574, ii.
Navel-wort, 302, i. —
 creeping, ib. — small, 433, ii. —
 Summer, 230, i.
Nawew, gentle, 377, i. —
 Candy wild, ib.
Nauseas, 135, i. — 208, ii. —
 229, ii. — 301, i. — 319, i. —
 355, ii. — 413, i. — 595, i. —
 655, ii.
Neck, Stiffness of the,
 379, ii. — 510, i. — Tumors
 of, 523, ii. — Pain of,
 525, ii.
Nepeta, (*Nep.*) 379, i.
Nephritic Decoction, 690, ii.
 — Water, 644, ii.
Nephritic Pains, 214, ii. —
 215, ii. — 242, ii. — 243, i. —
 246, i. — 267, i. — 282, ii. —
 286, i, ii. — 295, i. — 308, ii. —
 320, i. — 328, i. — 369, i. —
 382, ii. — 390, ii. — 405, ii. —
 423, i. — 462, i. — 466, i. —
 467, ii. — 485, ii. — 486, i. —
 493, ii. — 504, ii. — 506, ii. —
 518, ii. — 519, ii. — 531, i. —
 532, i. — 580, ii. — 605, ii. —
 620, i. — 690, ii. — 764, i.
Nephriticum Lignum, see
Glans Unguent. 326, ii.
Nerium, 379, i.
Nerve-Ointment, 749, ii.
Nerves, to strengthen, 207, i. —
 208, ii. — 238, ii. — 247, i, ii. —
 248, i. — 249, i, ii. — 250, i. —
 260, ii. — 261, i. — 262, i. —
 273, ii. — 274, i. — 276, i. —
 277, i. — 280, ii. — 282, ii. —
 287, ii. — 321, ii. — 333, i, ii. —
 334, i. — 343, ii. — 354, ii. —
 355, ii. — 303, i. — 391, ii. —
 393, i. — 394, ii. — 421, ii. —
 450, i, ii. — 514, i. — 582, i. —

421, ii. — 430, ii. — 441, ii. —
 450, i. — 460, i. — 408, i, ii. —
 502, i. — 503, i. — 505, ii. —
 517, ii. — 520, ii. — 522, i. —
 532, i. — 535, i. — 539, ii. —
 609, i. — 638, i. — 652, ii. —
 653, ii. — 676, ii. — 677, ii. —
 681, ii. — 749, ii. — 758, ii. —
 764, i. — 791, i. — 793, i. —
 794, ii. — 810, i. — 811, ii.
Nettle, Hedge, 323, i. —
 common stinging, 470, i. —
Roman, 470, ii. — Tree,
 284, i.
Nicotiana, 379, i. — 381, i.
Nigella, 381, i.
Nigellastrum, 381, i.
Nightingale, 518, i.
Night-mare, 547, i.
Night-shade, deadly, 252, ii.
 — the Effect of its Berries
 cured, ib. — *Pison*, 444, ii.
 — sleepy, 445, ii. — Tree, ib.
Nipple-wort, 352, ii.
Nipples, 223, i. — 352, ii. —
 533, i. — 559, ii. — 795, ii.
Nitre, 574, ii. — 575, ii. to
 582. — Troches of, 733, ii.
 — fixed, 727, ii. — Refine-
 ment and Crystallization
 of, 799, i. — Spirit of, 800,
 ii. — *Glauber's*, ib. — dulci-
 fied, 801, i. — vitriolated,
 801, ii.
Nitrum, 575, ii. — *Fixatum*,
 777, ii. — — *Vitriolatum*,
 801, ii.
Nits, 336, i.
Noctua, 522, ii.
Nomæ, 278, i. — 409, i. —
 411, i. — 479, i.
Nope, 527, i.
Nose, Defects of the, 259,
 ii.
Nostrils, Obstructions of,
 790, i.
Nuces à Barbadoes, 381, i.
Nummularia, 381, i.
Nutmeg, Oil of, 762, ii. —
 763, i.
Nutmeg-Tree, 382, ii. —
 Water, 645, i.
Nutmegs, Torrefaction of,
 227, i.
Nutritum-Ointment, 750, i.
Nuts, *Meluco*, *Bezoar*, 256,
 ii. — Earth, *Kipper*, Pig,
 Hawk, 264, ii. — *Maldiwa*,
 295, ii. — *Barbadoes*, 381, ii.
 — Hazel, 382, i. — *Vomic*,
 383, ii. — *Puiging*, 394, i. —
Spanish, 444, i.
 Nut-tree,

I N D E X.

- Nut-tree, Pistick, 383, ii.
 —Bladder, 448, i.
Nux, 382, 383.
Nymphæa, 384, i.
 O.
Oak, 414, i.—of *Cap-padocia*, 224, ii.—es-culent, or sweet, 414, ii.—Gall, ib.—Holme, with great Acorns, 209, i.—bitter, 214, ii.—of *Jerusa-lem*, 257, i.—Scarlet, 344, ii.—great, ib.
 Oak-lungs, 374, ii.
 Oat-grass, great, wild, or drank, 209, i.—261, ii.—Fern, 311, i.—white, 474, ii.
 Oats, 245, ii.
 Obstructions, of the Liver, 202, i.—in general, 207, ii.—208, ii.—269, ii.—302, ii.—400, i, ii.—409, ii.—421, ii.—422, i.—431, ii.—445, i.—466, i.—482, ii.—506, ii.—511, i.—517, ii.—552, i.—571, i, ii.—578, i.—589, ii.—608, i.—680, i.—742, ii.—770, ii.—824, ii.—835, i, ii.
Obbra, 582, ii.
Ocimum. See *Basilicum*, 251, i.
Oculi Cancrorum, vid. *Astra-cus Fluvialis*, 485, ii.
Oculis Lacrymans, 466, i.
Ocymoides, 384, i.
Oenanthe, 384, ii.—385, i.
Oenopha, 346, ii.—385, i.
Oesophagus, 208, ii.—581, ii.
Offa Helmontium, 741, ii.
 Oil of Earth, 582, ii.
 Oils, in general, 735, i.—those obtained by Expressi-on, 737, ii.—by Infusion and Decoction, 738, ii.—distilled, 762, i.—and es-sential, ii.
 Ointment of *Artacus*, 746, i.—of three Ingredients, 750, i.
 Ointments, Rules for mak-ing, 744.—of divers Kinds, 745, i. & seq.
 Oker, yellow, 582, ii.—red, 586, ii.—*English*, 597, i.
 Old-wife, 533, i.
Olea, 385, i.
Oleander, 379, i.
Oleaster, 385, ii.
Oleum Terræ, 582, ii.—*A-mygdalarum dulcium*, 737, ii.—*Abfintibites*, 738, ii.—*Anethinum*, ib.—*Hyperici*, —*Liliorum alborum*, —*Rofarum rubrarum*, —*Rutaceum*, —*Hyperici*, —*Lumbrico-rum*, —*Mucilaginum*, 739, i.—*Mucilagimbus*, —*San-bucinum*, —*Viride*, ii.—*Ab-fintibii*, —*Carni*, —*Caryo-phyllorum*, —*Cinnamomi*, —*Corticis Limonum*, —*Cumini*, —*Florum Chamæmeli*, —*Fre-niculi*, &c.—*Hyssopi*, —*La-wendulæ*, &c.—*Ligni Sassa-fras*, —*Macis*, —*Marjorana*, —*Mentha*, —*Nucis Mos-chata*, —*Origani*, —*Pule-gii*, —*Roris Marini*, —*Ru-tæ*, &c.—*Seminum Anisi*, 762, i, ii.—*Baccarum Ju-niperi*, 763, i.—*Terebintbi-næ*, 769, i.—*Æthereum*, & *Balsamum*, ii.—*Guaiaci*, ib.—*Cyparissæ Compositum*, 770, i.—*Buxi*, ib.—*Ben-zoini*, ib.—*Laseritium*, ii.—*Picis Barbadosensis*, 771, i.—*per Deliquium*, 777, ii.—*Corni Cervi*, 787, i.—*Anim-alium*, 791, ii.—*Faliginis*, 793, i.—*Ceræ*, 795, i.—*Vitrioli*, 802, ii.—*Succini*, 810, ii.
Olibanum, 283, ii.—385, ii.
 Olive-tree, 385, i.—wild, ii.
Omphacium, 386, i.
Omagras, 386, ii.
 Ope-blade, 373, ii.
 Onions, barren, 478, ii.
Oniscus, vid. *Asellus Minor*, 484, ii.
Onobrychis, 386, ii.
Onosina, 386, ii.
Onyx, 583, i.—Stone, ib.
 Opal, Bastard, 545, i.
Opalus, (*Opal*) 583, i.
 Operation of Medicines, de-scribed, 132, to 134.
Ophites, (*Ophite*) 583, i.
 Ophthalmic Ointment, of Sir Hans Sloane, 750, ii.
 Ophthalmies, 311, ii.—395, i.—421, i.—516, i.—556, i.—567, i.—589, ii.—596, ii.
Opmoglossum, 386, ii.
Opisthotonos, 300, ii.
Opium, 386, ii.—bad Effects of, 238, ii.—strained, 626, ii.—Tincture of, 671, i.
 Opobalsam, 248, ii.
 Opobalsamum, 161, ii.
 Opodeldoc, 741, i.
 Opopanax. See *Panax Her-culeum*, 394, ii.—Prepara-tion of, 626, ii.
Opuntia, 389, i.
 Oranebe, white, 245, i.—stinking, ii.—wild, 476, ii.
 Orange-peel, simple, distilled Water of, 633, ii.—com-pound, ib.—Syrup of, 697, i, ii.—of the Juice, ib.—to candy, 708, ii.
 Orange-tree, 246, i.
 Orchis. See *Satyrum*, 443, i.
Oreoselinum, 389, i.
 Origanum Creticum, Origany of Crete, 389, ii.—Oil of, 762, i.
 Orleana, 389, ii.
 Ornithogalon, 480, ii.
 Ornithopodium, 390, i.
 Orobanche, 390, i.
 Orobus, 390, i.
 Orpiment, 545, i.
 Orpine, base, 438, i. — 452, ii.
 Orthopneia's, 268, ii.—282, i.—311, i.—346, ii.—356, i.—419, i.
 Oryza, 390, ii.
 Osmunda Regi: (*Osmund-ro-yal*) 391, i.
 Osteocolla, 583, i.
 Ostracites, 583, ii.
 Ostreum, 523, i.
 Ostrich, 531, i.
 Osyris, 391, i.
 Oubonna, 391, i.
 Otter, 518, i.
 Ovis, 523, i.
 Ounce, 519, i.
 Owl, Barn, or white, 524, ii.—grey, 534, i.
 Ox, 488, i.
 Oxalis. See *Acetosæ*, 204, ii.—225, i.
 Ox-eye, 265, i. — Daisy, 356, i.
 Ox-lips, 396, i.
 Oxyacantha. See *Spina Al-ba*, 447, i.
 Oxycedrus. See *Cedrus*, 283, i.
 Oxycoccus, 391, i.
 Oxycroceum, 758, ii.
 Oxylapathum. See *Lapathum*, 382, ii.—353, i.
 Oxyvel ex Alho; (white Gar-lick) 704, ii.—*Pectorale*, (*Pectoral*) 705, i.—*Scilli-ticum*, ib.—*simplex*, ib.
 N n n Oxys.

I N D E X.

Oxys. See *Acetofella*, 205, i.
Oyster, 523, i. — green, 480, ii.
Ozana's, 336, i.

P.

P*adus.* See *Cerasus*, 284, i. — 285, i.
Paonia, 391, ii.
Paigles, or *Cowslips*, 395, ii.
Pains, intense, what Air fits for them, 21, i. — in the Stomach, 201, ii. — of the Head, 213, ii. — 254, ii. 255, ii. — 272, i. — 291, ii. — Breast, 305, ii. — Sides, 322, ii. — 342, i. — Stomach, 352, i. — Sides, 364, i, ii. — 379, i. — 388, ii. — Head, 395, i. — 402, i. — 407, ii. — 411, ii. — Bones, 416, ii. — *Periosteum*, 416, ii. — 417, ii. — Head, 419, ii. — cholic, 426, i. — 429, i. — Head, 441, i, ii. — Joints, 444, i. — 457, i. — acute, 461, i. — 464, ii. — 465, i. — Side, 465, i. — Stomach, 473, i. — Liver, 474, i. — internal, 482, i. — 484, i. — 489, ii. — 500, i. — Hips and Sides, 500, ii. — 512, ii. — 526, ii. — Stomach, 337, ii. — in Excretion of Stones, 582, ii. — 642, ii. — 758, ii.
Pains of Jundry Kinds, 282, ii. — 286, ii. — 287, i. — 288, i. — 323, i. — 342, ii. — 343, i. — 344, ii. — 352, i. — 355, i. — 359, i. — 360, i.
Palenels, 245, i. — 338, ii.
Palmus, 392, i. — Oil-tree, 393, i. — Dwarf, 394, i.
Palma, 392, 393, 394, i.
Palpitations of the Heart, 243, i. — 277, i. — 292, i. — 302, ii. — 306, i. — 359, i. — 382, ii. — 486, ii. — 520, ii. — 561, i. — 637, ii. — 647, ii. — 764, ii. — 792, ii.
Palsies, how produced, 40, i. — how arise, 17, ii. — 18, ii. — 19, i. — 40, i. — Cure of one, 38, ii. — others helped, 143, i. — 220, i. — 248, ii. — 252, i. — 254, ii. — 261, i. — 263, i. — 270, i. — 274, i, ii. — 275, i. — 285, i. — 287, ii. — 301, ii. — 334, i. — 345, i. — 353, i, ii. — 356, ii. — 358, i. — 370, ii. — 391, ii. — 394, ii. — 407, i. — 414, i. — 421,

ii. — 426, i. — 427, ii. — 443, i. — 448, ii. — 451, ii. — 470, i. — 494, i. — 498, ii. — 508, i. — 584, ii. — 585, i. — 642, ii. — 683, ii. — 764, i. — 592, ii.
Palsy-drops, 649, i.
Palumbus, 523, ii.
Pandiculations, 208, ii.
Panax, 394, ii.
Pani, 531, ii.
Panic, 394, ii.
Panicum, 394, ii.
Papaver, 395, i, ii.
Paper-reed, 395, ii.
Papilla, nervous, 795, ii.
Papyrus, 395, i.
Paradisi Grana. See *Cadamomum*, 276, ii.
Paragoric Elixir, 678, i.
Paralysis, 395, ii.
Paralytic Diseases, 276, ii. — 314, ii. — 492, ii. — 561, i. — 740, i. — 764, i.
Parapneumonia, 257, i.
Pardus, 523, ii.
Parella, 396, i, ii.
Parietaria, 396, ii.
Park-leaves, 236, i.
Parma-fitty, of the Whale, 530, i.
Parnassia. See *Cramen Parnassi*, 329, i.
Paronychia, 341, ii. — 361, ii. — 397, ii.
Parotides, to repress, 261, i. — 289, ii. — 323, i. — 468, ii. — 534, i.
Paroxysmus, arthritic, how excited, 17, i.
Parley, 399, ii. — Bastard, 478, i. — Hedge, ib. — *Maccedonian*, 400, i. — milky, 457, i. — Mountain, 389, i. — Stone, 400, i. — Bastard Stone, 225, i. — wild, 477, ii.
Parley-piert, 398, i. — Water, compound, 645, ii.
Parfneep, 397, ii. — Cow, 447, i. — upright, 444, i. — Water, ib. — wild, 397, ii.
Parthenium. See *Matricaria*, 368, i.
Partridge, common, 524, ii. — red-legged, 525, i.
Parus, 523, ii.
Pasque-flower, 413, ii.
Pasfir, 524, i.
Passions, epileptic and hyftecric, 262, ii.
Pastinaca, 397, ii. — *Marina*, 524, i.

Pastula. See *Uva*, 472, i.
Paulina Confection, 718, i.
Pavo, 524, i.
Peach-tree, 398, ii. — Blossoms, Syrup of, 701, i.
Peacock, 524, i.
Pear, *Spanish*, 398, ii.
Pearch, 525, ii.
Pear-tree, 414, ii. — prickly, 389, ii.
Peas, common, white, 405, ii. — everlasting, 353, ii.
Pectoral Electuary, Decoction, 691, i. — 723, ii. — Elixir, 681, ii.
Pills, 728, ii. — Syrup, 701, i. — Troches, white, 732, ii. — black, ib.
Pectunculus, 524, i.
Pedicularis, 397, ii.
Pediculus, 524, ii.
Pedro del Cobra, vid. *Serpens Indicus*, 528, ii. — *del Porco*, vid. *Hyssric*, 512, ii.
Peg-root, 340, i.
Pellitory of Spain, and the true, 414, i. — of the Wall, 396, ii.
Penis, Tumours of the, 373, i. — Inflammations, 461, ii.
Penny-royal, 413, i. — upright, ib. — Hart, ii. — Oil of, 762, i. — 763, i. — Syrup of, 761, ii. — Water, spirituous, 645, ii.
Pentaphyllum, 398, i.
Peper-tree, 457, i.
Pepo, 398, i.
Pepper, 403, i. — *Jamaica*, 281, i. — Water of, 634, i. — *Guinea*, 276, i. — long, 368, ii. — 405, i. — Mint, simple Water of, 634, i. — spirituous, 644, i. — Wall, 438, i. — Water, 399, i. — Wort, (*Melanthium*) 369, i.
Perca, 524, ii.
Perceper, 398, i.
Perdix, 524, ii. — 525, i.
Perfoliata, 398, i.
Perforata. See *Hypericum*, 343, ii.
Perichymenum. See *Caprifolium*, 275, ii.
Peripneumonies, 17, i, ii. — 34, i. — 38, ii. — 208, ii. — 257, i. — 272, i. — 376, i. — 390, ii. — 393, i. — 400, i. — 410, ii. — 436, ii. — 440, ii. — 470, ii. — 581, ii. — 835, ii.
Peripocla, 398, i.
Periwinkle,

- Pewinkle*, 467, i. — *great-*
er, ib. — 501, ii.
Persea, 398, ii.
Persecutaria, 399, i.
Persica Malus, 398, ii.
Perfonata. See *Bardana*,
 250, ii. — 251, i.
Perpiration, to procure, 45,
 ii. — 216, i. — 298, ii. — 303,
 i. — 332, i, ii. — 449, ii. —
 528, ii. — 531, i. — 593, ii. —
 619, ii. — 632, i. — 638, i.
Peruviana. See *Vinea Peru.*
 467, i.
Peruvian Bark, simple Tinc-
 ture of, 965, ii. — volatile,
 ib.
Peruvianus Cortex. See *Ki-*
nna, 349, i.
Perygia vel Alaternus, 213,
 ii.
Pes, 399, ii.
Pestilence, 319, ii. — 11, ii. —
 16, ii. — 18, ii. — 326, ii. —
 391, ii. — 436, ii. — 463, ii. —
 502, i. — 511, ii. — 532, i, ii. —
 545, i. — 86, ii.
Pestilential Disorders, 258, ii.
 — 273, i. — 275, ii. — 278,
 ii. — 324, ii. — 570, ii. —
 792, ii. — 833, ii.
Pestifites, 399, ii.
Peterbica, 618, i. — 790, i.
St. Peter's-Corn, 261, ii. —
 Wort, 242, i.
Petroleum, 583, ii.
Petroelinum, 399, ii. — 400,
 i.
Petum. See *Nicotiana*, 379, i.
Peucedanum, 409, i.
Phagadema, 520, i.
Phagedenic Water, 658, ii.
Phagus. See *Quercus*, 414, ii.
Phalangium, 340, ii.
Phalaris, 340, ii.
Phaseolus, 340, ii.
Phelandrium, 400, ii.
Phellodrys, 401, i.
Phillyrea, 401, i.
Philonum Londinense, 724, i.
Philtre, 526, ii.
Phlegm, 208, i. — 394, ii. —
 400, i, ii. — 417, i. — 425,
 ii. — 463, i. — 465, ii. — 466,
 i. — 472, ii. — 480, ii. — 482,
 ii. — 559, ii. — 763, ii. — 800,
 ii. — 809, i. — 819, i.
Phlegmon, 512, i.
Phlomis, 401, i.
Phoca, 525, i.
Phoenix. See *Lohum*, 360, i.
Phosphorus, 563, i.
Phrenitis, 257, i. — or *Phren-*
fies, 272, i. — 351, ii. —
 411, i. — 441, i. — 445, i. —
 503, ii. — 508, ii. — 523, ii. —
 581, ii. — 621, ii.
Phthisic Tincture, 663, i.
Pathifics, 227, i. — 257, ii. —
 279, i. — 394, i. — 407, i. —
 421, i. — 495, i. — 809, i.
Phroifis, 21, i. — 138, ii. —
 204, i. — 222, ii. — 239, ii. —
 258, i. — 264, i, ii. — 303, i. —
 309, i. — 356, i. — 364, i. —
 367, i. — 402, i. — 407, i. —
 422, i. — 436, ii. — 443, ii. —
 445, i. — 463, i. — 465, ii. —
 466, i. — 467, ii. — 479, i. —
 485, i. — 486, i. — 498, i. —
 500, i. — 507, i. — 523, i. —
 purulent, 546, i. — 563, i. —
 593, i. — 597, i. — 621, ii.
Phu, 401, i.
Phylon, 401, i.
Phyllitis, vid. *Lingua Cer-*
vina, 358, ii.
Physic, its different Provin-
 ces confounded, 3, i. — greatly
 injurious to the Patient, ii. —
 defined, 133, i.
Physician, his Province, 2,
 i. — 132, i. — very useful
 Check to the rest, 3, ii. —
 ought to be well-skilled in
 the Effects of the Air upon
 human Bodies, 15, i. — 16, i. —
 19, ii. — 25, i. — how he may
 prevent infection, 21, ii. —
 ought to be well acquainted
 with the Properties of Wa-
 ter, 37, ii.
Physiema, vid. *Refeda*,
 417, i.
Physog, or *Chinese Mug-*
wort, 374, i.
Phytolacca, 401, ii.
Pica, 469, i. — 525, i.
Pick-tooth, Oriental, 325, ii.
 — *Spanish*, 469, i.
Pidgeon, 503, ii.
Pike, or *Pickereel*, 517, i.
Pila Marina, 525, i.
Piles, 252, ii. — 286, i. —
 287, i. — 290, ii. — 291, i. —
 302, i. — 358, ii. — 373,
 i. — 409, i. — 422, ii. —
 437, i. — 505, ii. — 532, ii. —
 710, ii.
Pills, Rules for making,
 725, i. — of two Ingredi-
 ents, 727, i.
Pilosella, 401, ii.
Pilula Ethiopica, 725, i. —

- Mercurialis*, 726, i. — —
Laxantes, ii. — *Aromatica*,
 ib. — *Coccia*, ib. — *ex Colo-*
cynbide cum Aloe, 727, i. —
de Duobus, ib. — *ex Colo-*
cynbide Simpliciores, ib. —
Espbraetica, ii. — *Cha-*
lybeata, 728, i. — *Fucida*,
 ib. — *de Gambogia*, ib. —
Gummosa, ii. — *Pectorales*,
 ib. — *seu Extractum Radii*,
 729, i. — *Rufi*, ib. — *Riverii*,
 ii. — *Matthaei*, ib. — *Starkii*,
 730, ii. — *Pacifica*, vulg.
Matthaei, 731, i. — *Sapona-*
cea, ib. — *Scillitica*, ib. —
Stomachica, ii. — *de Styrace*,
 ib. — *Panacea Mercurii*,
 823, ii.
Pimenta, 281, i.
Pimples, 296, ii. — 352, ii. —
 405, ii. — 437, i. — 494, i.
 ii. — 516, i. — 557, ii.
Pimpernel, male and female,
 228, ii.
Pimpinella, 401, ii. — 402, i.
Pine, Heath, 451, ii.
Pine, stinking Ground, 274,
 i. — *Apple*, 229, i. — *Tree*,
 402, ii. — *Mountain*, ib. —
Sea, 403, i.
Pinguicula, 480, ii.
Pinks, single, &c. 280, i.
 — wild, ii.
Pinus, 402, ii. — 403, i.
Piony, male, and female,
 391, ii. — *Syrup of*, 701, ii. —
Water, comp. 645.
Piper, 403, i. — *Indicum*, see
Capsicum, 276, i.
Piperitis, vid. *Lepidium*,
 356, i.
Pissalphaltus, vid. *Bitumen*,
 547, ii.
Pissileum Indicum, 584, ii.
Pistacia, vid. *Nux Pistacia*,
 383, i.
Pistachio, 383, i.
Pistolocchia, 405, i.
Pisum, 405, i.
Pitch, 405, ii. — *Jew's*, 544,
 ii. — common, fossile, 547,
 ii.
Pitting, by the Small-pox,
 to prevent, 743, ii.
Pityusa, vid. *Tithymallus*,
 457, i. & seq.
Pix, 405, ii. — 406, i.
Plague, how prevented, or
 removed, 22, i. — 205, i, ii. —
 207, i. — 228, ii. — 229,
 i. — 232, i. — 542, i. —
 N n n a 2 246

- 255, ii. — 266, i. — 272, ii. — 275, ii. — 278, ii. — 293, i. — 303, i. — 311, i. — 318, i. — 323, i. — 324, ii. — 348, ii. — 379, ii. — 389, i. — 399, ii. — 422, i. — 434, i. — 435, ii. — 454, i. — 476, i. — 490, ii. — 492, i. — 499, ii. — 503, i. — 511, ii. — 518, ii. — 533, i. ii. — 549, i. — 564, i. — 789, ii. — 792, ii. — 808, i.
- Plague-water, 643, ii.
- Plaster of Paris, 743, i.
- Plasters, Rules for making, 744. — of divers Kinds, 754, ii. & seq.
- Plane-tree, 407, ii.
- Plantage, 407, i. ii.
- Plantain, great, 407, i. — heavy, *Spanish*, and Water, ii. — Extract of, 771, i.
- Plantain-tree, 374, ii.
- Plantanus, 407, ii.
- Pleurishes, 16, ii. — 17, ii. — 39, i. — 138, ii. — 151, ii. — 205, i. — 209, i. — 208, ii. — 209, ii. — 227, i. — 252, i. — 269, ii. — 271, ii. — 272, i. — 278, i. — 286, i. — 326, i. — 344, ii. — 346, ii. — 359, i. — 375, ii. — 382, i. — 382, ii. — 390, ii. — 393, ii. — 395, i. — 400, i. — 410, ii. — 412, i. — 434, i. — 456, ii. — 440, ii. — 463, i. — 462, ii. — 463, i. ii. — 465, i. — 487, ii. — 468, ii. — 470, ii. — 485, ii. — 499, ii. — 507, i. — 518, i. — 524, ii. — 525, ii. — 330, ii. — 333, i. — 581, ii. — 792, ii. — 835, ii.
- Plica Potolica*, 362, i.
- Plaver, great, 599, ii.
- Plumbage, 585, i. ii.
- Plumbago, 408, ii. — 585, i.
- Plumbum, 585, i. ii.
- Plump, to make, 338, ii.
- Pnigites, 585, ii.
- Pneumoniae*, vid. *Gen.*
- Pugius*, 324, ii.
- Pockwood, or *Guaicum*, 330, ii.
- Podagra, 382, ii.
- Poison-fish, 524, i.
- Poisons, 136, i. — 201, ii. — 205, ii. — 225, ii. — 227, i. — 231, ii. — 235, ii. — 238, ii. — 242, i. — 260, i. — 262, ii. — 296, i. — 298, ii. — 299, i. — 316, ii. — 318, ii. — 341, i. — 356, i. — 364, ii. — 368, ii. — 377, i. — 379, ii. — 382, ii. — 384, ii. — 402, i. — 407, i. — 426, i. — 428, i. — 435, ii. — volatile, 436, ii. — 460, ii. — 476, i. — 493, i. — 499, ii. — 502, i. — 505, i. — 506, i. ii. — 518, i. — 520, i. — 522, ii. — 523, ii. — 526, ii. — 528, ii. — 534, i. — 536, i. — 537, ii. — 544, ii. — 549, i. — 561, i. ii. — 564, i. — 570, ii. — 588, ii. — 589, ii. — 595, ii. — 596, i. — 638, i. — 789, ii. — 808, i.
- Point of Saturation, what, 70, i.
- Poley, Mountain, white, 408, i. — with Lavender-leaves, erect, and of Candia, ii.
- Polemonium, 408, i.
- Polium, 408, i. ii.
- Pollutions, Nocturnal, 384, i. — 394, ii.
- Polygala, 408, ii.
- Polygonatum, 408, ii.
- Polygonum, 409, i.
- Polypodium, (Polypody of the Oak) 409, i.
- Polypus, 376, ii. — 378, ii.
- Polytricum *Aureum*, See *A. dianthum Aureum*, 209, i.
- Pomatum, 752, i.
- Pomegranate-tree, 320, ii.
- Pompholyx, 585, ii. — 748, ii.
- Pompon, common, 398, i.
- Pond-weed, 41, i.
- Poplar, black, and white, 409, ii. — Ointment of, 751, ii.
- Poppies, white, Syrup of, 699, ii. — wild, 700, ii. — red, ib.
- Poppy, white, and red, 395, i. — long-headed, ii. — spatling, 252, i. — yellow-horned, 327, i. — Juice, 368, ii.
- Populago, vid. *Caletula*
- Pal. 270, i.
- Populus, 409, ii.
- Porcupine, 512, ii.
- Porcus, 525, i.
- Pork-physic, 401, i.
- Porphyritis, (Porphyry) 586, i.
- Porrum, 410, i.
- Portulaca, 510, ii.
- Pot-ashes, where and how made, 66, i.
- Potamogeton, 412, i.
- Potatoes, *Virginia*, or *Irish*, 251, ii. — *Spanish*, 477, i.
- Potential Cautey, 785, ii.
- Potentilla, See *Argentina*, 236, i.
- Poterium, vid. *Tragacantha*, 459, ii.
- Poudre des Chartreux, 834, ii.
- Powder, (common) the immoderate Use of it, pernicious to the Head, 183, ii.
- Powders, Rules for making, 709, i. — of four Ingredients, 714, i. — of five, ib.
- Pracordia, Humours about the, 238, i. — 268, i.
- Præfius, 586, i.
- Prawn, 505, i.
- Precipitation described, 120 to 123 — the first Cause, 120, i. — the second, ii. — the third, 121, ii. — the fourth, 122, i.
- Pregnancy, 764, ii.
- Preserves, 707, ii.
- Pricks of Horses, when shod, 744, ii.
- Prima Viæ, Disorders of, 221, i. — 233, i. — 241, ii. — 245, ii. — 268, i. — 279, ii. — 366, i. ii. — 441, i. — 580, ii. — 656, i. ii. — 712, ii. — 784, ii.
- Primrose, 411, i. — pearls, 377, ii.
- Primula Veris, 411, i.
- Privet, Evergreen, 213, i. — Eastern, ii. — 357, ii.
- Mock, 401, i.
- Procidencia Uteri, 437, ii.
- Propolis, vid. *Apes*, 482, ii.
- Proscarabæus, 526, i.
- Prætelia, 411, i. — Salt, 800, i.
- Prune, Danaask, and common, 411, ii.
- Prunus, 411, ii.
- Pseudo-acacia, 412, i. — *Distamnus*, *Helleborus*, *Ipo-cacua*, ii. — *Pferu*, 260, i. — 416, ii. — 506, i. — 568, i. — 531, i. — 593, ii.
- Psyllium, 412, ii.
- Piarmica, 413, i.
- Pterygium, 594, ii.
- Pudding Pipe-tree, 282, i.
- Pudenda, Swellings of the, 244, i. — 302, i. — 325, i. — to mollify, 358, ii.
- Puff-balls, or Molly-puffs, 322, i.
- Pulegium, 413, i. ii.
- Pulmo Marius, 526, i.
- Pulmonaria,

Pulmonaria, 413, ii.
Pulmonic Disorders, 531, ii.
Pulsatilla, 413, ii.
Pulsis Antiepilepticus, de
Gutteta dictus, 709, ii.
Epilepticus niger, 710, i.
Antilyssus, ii. — *Ari Com-*
positus, 711, i. — *Bezoar-*
dicus, ib. — *de Bolo Composi-*
tus sine Opio, iii. — *cum*
Opio, ib. — *Cephalicus*, 712, i.
Sternutarius, ib. — *de Ceru-*
sa Compositus, ib. — *de Chelis*
Cancrorum Compositus, ib.
Contraryerwæ Compositus, ii.
Cornacini, 713, i. — *de Scam-*
monio Compositus, ii. — *Dia-*
romatum, ib. — *Diasennæ*,
 714, i. — *de Sena Composi-*
tus, ib. — *Diatefferon*, ib.
Diapente, ib. — *Diatragi-*
cambi frigidus, iii. — *de Tra-*
gacantha Compositus, ib.
Hiera Picra, ib. — *de Myrr-*
ha Compositus, 715, i. —
ad Partum, ib. — *Strypticus*,
 ii. — *de Succino Compositus*,
 ib. — *Vermifugus*, ib.
Pumex; *Pumice-stone*, 586, i.
Punctures, 229, ii. — 518, i.
Punica, vid. *Granata*, 329, ii.
Purple-fish, 526, i. — *Grass*,
 461, ii. — *Wort*, ib.
Purpura, 526, i.
Purslane, *bea*, 335, ii.
Purslane, 410, i. — *wild*,
 common Sea, 335, ii.
Pustules, 227, iii. — 360, ii.
 415, ii. — 448, i. — 491, ii. —
 511, ii. — 559, ii. — 572, ii. —
 790, i.
Putrefaction described, 123,
 124.
Putrefactions; *how arise*,
 19, i. — *to prevent*, 273, ii.
resist, 309, ii. — 323, i. —
 379, ii. — 381, ii. — 410, ii. —
 419, ii. — 420, i. — 425, i. —
 465, ii. — 473, ii. — 501, i. —
 506, ii. — 511, ii. — 528, ii. —
 549, i. — 580, i. — 587, i. —
 588, ii. — 609, i. — 646, ii. —
 655, ii. — 679, i. — 680, i. —
 797, i. — 799, i. — 808, i. —
 809, ii.
Putty, 590, ii.
Pyracantha, 414, i.
Pyretbrum, 414, i.
Pyrites, 586, i.
Pyrola, 414, i.
Pyrus, 414, ii.

Q

Quail, 505, i.
Quartans, 34, i. —
 139, i. — 216, ii. —
 294, ii. — 316, ii. — 320, i. —
 338, i. — 339, i. — 357, ii. —
 369, i. — 381, i. — 416, ii. —
 423, i. — 438, i. — 443, i. —
 468, ii. — 484, i. — 502, i. —
 506, i. — 516, ii. — 565, ii. —
 800, ii. — 817, i. — 818, i.
Quotidians, 369, i. — 381, i. —
 443, i. — 497, ii. — 579, ii.
Quercus, 414, ii. — 415, i.
Quicken-tree, 446, ii.
Quick-in-hand, 247, ii.
Quick-silver, 571, ii. —
Antidote against it, 443, ii. —
Purification of, 815, i. —
Solution of, 815, i. — *Calc-*
of, 816, i. — *calcined*,
 816, i.
Quince-seed, *Mucilage of*,
 695, ii. — *Tree*, 306, ii.
Quinces, *Syrup of*, 698, ii. —
Jelly, or *Marmalade of*,
 705, ii.
Quinquesfolium, see *Penta-*
phyllum, 398, i.
Quinquenerwia, see *Plantago*
August, 407, ii.
Quinquina, vid. *Kina-kina*,
 349, i.
Quinseys, 16, ii. — 17, ii. —
 18, i. — 244, ii. — 247, i. —
 272, i. — 276, i. — 308, ii. —
 318, i. — 324, i. — 341, i. —
 344, i. — 375, ii. — 395, i. —
 396, ii. — 410, ii. — 411, i. —
 420, i. — 422, i. — 434, i. —
 437, ii. — 459, ii. — 462, ii. —
 464, ii. — 466, i. — 470, i. —
spurious, 491, ii. — 492, ii. —
 493, i. — 505, i. — 507, ii. —
 510, ii. — 511, i. — 512, i. —
 519, ii. — 523, i.

R.

R *Abbit*, 505, i.
Radicula, vid. *Ra-*
phanus Hortensis, 417, i.
Radish, 417, i. — *Horle*, ib.
 — *Water*, ib. — *wild*, 238,
 i. ii.
Radix, 415, i. ii.
Rag-wort, 344, i. — *five-*
leaved Mountain, 480, i.
Rain, 526, i.
Rain-bow-fish, 513, ii.
Raisins of the Sun, 469, ii.
Rapponia, 417, ii.
Rana, 526, ii.
Rangifer, 526, ii.
Ranunculus, 415, ii. — 416, i.
Rapa, 416, ii.
Rape of Cistus, 343, ii. —
 377, i.
Raphanus, 417, i. — *Sylve-*
stris, vid. *Armoracia*, 238,
 i.
Rapistrum, 417, ii.
Rapum, vid. *Rapa*.
Rapunculus, 417, ii.
Raspberry-bush, 422, ii.
Rat, 522, i. — *Egyptian*,
 513, i.
Rattle, yellow, 214, ii. —
 red, 397, ii.
Raven, 504, ii.
Red drying Ointment, 748, i.
Red-game, 486, i.
Reed, common, and great,
 240, i. — *Indian*, 275, i.
Refrigeration, to promote,
 369, i. — 376, ii.
Regina Prati, vid. *Ulmaria*,
 469, ii.
Regulus Antimonii, 827, i. —
 — *Martialis*, ib. —
Medicinalis, ii.
Reins, 318, i.
Reli, 509, ii.
Remedies originally simple, ii.
 the Benefits that would
 have occurred from the con-
 tinued Use of them, ii. —
 now again coming into ge-
 neral Practice, 2, i.
Remora, 526, ii.
Reseda, 417, ii.
Resin, Gum, 429, ii.
Resina, vid. *Pix*, 405, ii. —
Jallope, 774, i.
Resins, how prepared, 121, i.
Respiration, to help, 378, ii. —
 495, ii.
Rest, 208, i.
Resta Bovis, vid. *Anonis*,
 233, i.
Rest-harrow, 223, i.
Rhabarbarum, 417, i. — 418,
 i. — *Monachorum*, vid. *La-*
partum, 352, ii.
Rhamnodes, 418, ii.
Rhamnus, 419, i.
Rhaponticum, (i) *Rhapontic*,
 true, 419, i. ii.
Rhases, white Troches of,
 732, i.
Rheumatisms, how gene-
 rated, 17, ii. — *to relieve*,
 138, ii. — 200, i. — 220, i. —
 240, i. — 248, ii. — 250, i.
 — 252,

- 252, i.—260, i.—266, i.
 —273, ii.—278, i.—280, i.
 —286, ii.—287, ii.—298,
 i.—332, iii.—353, i.—
 366, ii.—369, ii.—370, i.
 —427, i.—440, ii.—452,
 i.—462, ii.—492, i.—
 505, ii.—657, i.—668, ii.
 —725, ii.—741, i.—782,
 ii.—816, i.
 Rheums, 363, ii.—367, i.
 —395, ii.—683, ii.
 Rhinoceros, 526, ii.
 Rhodia Radix, 419, ii.
 Rhodium Lignum, vid. Af-
 palatus, 242, i.
 Rhubarb, 138, i.—true,
 417, ii.—Torrefactions of,
 627, i.—Tincture of, 671,
 i.—bitter, ii.—sweet, 672,
 i.—in Wine, ibi.—in Spi-
 rit, ibi.
 Rhus, 419, ii.—420, i.
 Ribes, 420, i.
 Ribs, Pains of, 499, i.
 Rice, 390, ii.—437, ii.
 Ricinus, 420, i.—527, i.
 Rickets, what serviceable to
 them, 20, ii.—244, ii.—
 318, ii.
 Rigors, 261, i.
 Ringing in the Ears, 217, ii.
 —226, ii.—241, ii.—482,
 i.—484, i.—488, i.—498, i.
 —499, ii.
 Ring-worms, 289, ii.—475,
 i.—494, i, ii.—497, ii.—
 506, i.—792, ii.
 Ritro, 420, ii.
 Riverius's Pills, 729, ii.
 Rob Baccarum Sambuci, 706,
 ii.
 Robert, Herb, 325, i.
 Robin-red-breast, or Red-
 dock, 527, i.
 Robur, vid. Quercus, 414, ii.
 Rocamboe, 219, i.
 Roche, 327, i.
 Rock-fish, 509, ii.
 Rocket, Garden, 314, ii.—
 wild, 315, i.—base, 417, ii.
 —small, ibi.
 Root, hollow, 321, ii.—
 Brazilian, 345, ii.
 Roots, the five opening,
 622, i.—Syrup of, 701, ii.
 Rorella, vid. Ros Solis, 422, i.
 Rosa, 420, ii.—428, i.—
 Solis, 422, i.
 Rose, Briar, or Dog, 420,
 ii.—Damask, and Damask-
 Province, ibi.—Red, white,
 and Muske, 421, i.—Rock,
 456, i.
 Rose-bay, 379, i.—386, ii.
 —Ointment, 752, i.—
 Wood, (or Rhodium) 242,
 i.—Wort, 419, ii.
 Rosemary, 421, ii.—Poets,
 391, i.—Bohemian, 479, i.
 —Oil of, 762, i.—763, i.
 Roses, Damask, Syrup of,
 702, i.—solative, ibi.—of
 dried, ibi.—Honey of, 704,
 ii.—Sugar of, 709, i, ii.—
 Tincture of, 672, i.—Vi-
 negar of, 66, i.—Water of,
 634, ii.
 Rosmarinus, 421, ii.
 Rubecula, 527, i.
 Rubia, 422, i.
 Rubicilla, 527, i.
 Rubinus, 586, ii.
 Rubrica, 586, ii.
 Rubus, 422, i, ii.—423, i.
 Ruby, 586, ii.
 Rudius's Extract, 729, i.
 Ruddle, 586, ii.
 Rue, 423, i.—Meadow, 453,
 ii.—Spanish, 454, i.—
 wild, 335, ii.—Extract of,
 771, ii.—Oil of, 762, i.—
 763, i.—Simple water of,
 638, ii.
 Rue-whitlow-grass, 397, i.
 Ruff, 409, i.
 Rufus's Pills, 729, i.
 Running, to check, 807, ii.
 Rupture-wort, 341, ii.
 Ruptures, 214, i.—244, i.—
 252, i.—255, ii.—283, i.—
 311, i.—341, ii.—386, ii.
 —391, i.—397, i.—419, i.
 —430, i.—441, i.—442, i.
 —464, i.—476, ii.—477, i.
 —499, ii.—570, ii.
 Ruscus, vid. Bruscus, 261, ii.
 Rush, common, soft, prick-
 ing, large, Sea, and Bull,
 347, i.
 Rusma, 557, ii.
 Russia-seed, 329, i.
 Ruta, 423, i.—Capraria,
 vid. Galega, 323, i.—Mu-
 raria, vid. Adiantum al-
 bum, 209, i.—Syboestris,
 vid. Harmala, 335, ii.
 Rutilus, 527, i.
 S.
 Sabina, 423, ii.—424,
 i.
 Saccharum, 424, i.—Horde-
 atum, seu Penidiatum, 709, i.
 —Rosarum rubrum, ibi.
 —Rosarum, ii.—Saturni,
 813, i.
 Sadness, 503, ii.—554, ii.
 Saffron, 302, ii.—Ba-
 stard, 279, i.—deadly,
 314, i.—Meadow, 297, ii.
 —Extract of, 772, i.—Sy-
 rup of, 698, ii.—Tincture
 of, 666, i.—Wine, 685,
 ii.
 Sagapenum, 424, i.—Gum,
 Oil of, 626, ii.
 Sage, common, 427, ii.—
 of Jerusalem, 413, ii.—
 narrow-leaved, ibi.—Spu-
 nish, 428, i.—of Virtue,
 ibi.—Wood, 436, i.—nar-
 row-leaved Wood, 458, i.
 —yellow, 341, i.
 Sagitta, 424, i.
 Sagittaria, 424, i.
 Sagou, 426, i.—Sago-tree,
 ii.
 Salamandra, (Salamander)
 527, i.
 Salep, 439, ii.
 Salicaria, vid. Lyfimacbia
 Purpurea, 362, ii.
 Saliva, to promote the Dis-
 charge of, 271, ii.—573, i.
 Salivations, to raise, 745, ii.
 —819, i.—820, i.
 Salvia, 427, ii.—428, i.—
 Vitæ, vid. Adiantum Al-
 bum, 209, i.
 Salix, 426, ii.
 Sambucus, 428, ii.—429,
 i, ii.
 Sampire, 302, ii.
 Sampsucum, vid. Majorana,
 363, i.
 Salsaparilla, or Sarsaparilla,
 462, ii.
 Sal, 586, ii.—Absinthii,
 775, i.
 Sal Ammoniac, 600, i.—
 Salt of, 793, i.—Volatile,
 ii.—dulcified Spirit of,
 794, i.—Flowers of, ibi.
 Sal Ammoniacum, 600, i.—
 factitium, 793, i.—Catbar-
 ticum Amarum, 602, i.—
 Catharticum Glauberi, 798,
 ii.—Cornu Cerui, 787, i.—
 Diureticus, 780, i.—Enix-
 us Paracelsi, 801, ii.—
 Essentiale Acetosæ, 774, ii.—
 Fuliginis, 793, i.—Jovis,
 811, ii.—Martis 814, i.—
 Mirabile Glauberi, 798, ii.—
 Polybrestum, 82, ii.—607,
 i.

I N D E X

- I.**—800, i. — *Prunella*, ib. —
Succini rectificatum, 810, ii. —
Tartari, 777, i. — *Volatile*,
 610, ii. — *Oleofum*, 652, i. —
 653, i. — *Tartari*, 69, i. —
Volatilis Salis Ammoniaci,
 793, ii.
Salt, Alkaline, the Cause of
 Vegetation, 110, ii. &c.
Salt, 586, ii. — *Epsom*, 602,
 i. — of Glass, 606, ii.
Salt, Spirit of, 795, i. —
 Sea, *Glauber's Spirit* of,
 796, i. — Spirit of, coa-
 gulated, 798, ii. — of many
 Virtues, 800, i.
Salt-petre, Deception of,
 691, i.
Salts, essential and fixed,
 774, ii. — Preparations of,
 795, i.
Saamunda, 429, ii.
Sand, Sea, 540, ii.
 Sand in the Kidneys, to ex-
 pel, 213, i. — 226, i. —
 263, ii. — 277, ii. — 349, i. —
 452, ii. — to prevent, 580, ii.
Sandaracha, 429, ii.
Sanders, 430, i. — red,
 431, i.
Sandiver, 606, ii.
Sanguis Draconis, vid. *Dra-*
co Arbor, 310, ii.
Sanguisuga, 527, i.
Sanicle, 429, ii.
Sanicula, 429, ii. — *Monta-*
na, vid. *Cortusa*, 301, ii.
Santalum, 430, i. — 431, i.
Santonium, 431, i.
Sapo, 606, ii. — *Amygdali-*
nus, 785, i. — *Helmontianus*,
 69, i. — *Tartareus*, 785, i. —
Terræ, 111, ii.
Saponaceous Liniment, 742, ii.
Saponaria, 431, i.
Sapphire coloured Water,
 658, ii.
Sapphirus, Sapphire, 589, i.
Saracens-confound, 310, i. —
 446, i.
Sarcocolla, (*Sarcocol*) 431, i.
Sardus, 589, ii.
Sarsaparilla, 426, ii.
Sassafras, 431, ii. — Tree,
 431, ii. — Wood, Oil of,
 762, ii.
Satin, or Honeſty, 264, ii.
Satin-flower, with long Pods,
 467, ii.
Satureia, 432, ii.
Saturnine Tincture, 663, i.
Satyrium, Male, Female,
 French, and German, 433,
 i. — Male-royal, ii.
Satyrium, 433, i, ii.
Sauce-all-alone, 215, ii.
Savine, 423, ii. — berried,
 424, i. — wild, 348, ii. —
 Leaves, Extract of, 771, ii. —
 Simple-water of, 637, ii.
Savory, Summer, Winter,
 true, and Rock, 432, ii.
Savoys, 259, i.
Saw-wort, 441, i.
Saxifraga, Saxifrage, white,
 great, and true, 433, ii.
Scabies, 486, i. — 531, i.
Scabiosa, (*Scabious*) 434, i.
Scabs, 296, ii. — 316, ii. —
 353, i. — 593, ii.
Scald-heads, 217, ii. — 314,
 ii. — 585, i. — 792, ii.
Scalds, 585, i. — 612, ii. —
 747, i.
Scammonium, (*Scammony*)
 434, i.
Scammony, Electuary of,
 723, ii. — Compound Pow-
 der of, 713, ii.
Scandix, 431, i.
Scarabæus, 527, i, ii.
Scariola, vid. *Cichorium La-*
tifolium, 290, i.
Scars, 494, ii.
Scelotyrbe, 260, ii. — 261, ii.
Scibirrus, 344, ii. — 390, i. —
 533, ii. — 572, ii. — 585, ii. —
Scbænoprassum, 435, i.
Schænantbus, vid. *Funcus*,
 Odor, 347, i.
Sciatica, 208, ii. — 209, ii. —
 220, i. — 242, i. — 250, i, ii. —
 251, i. — 254, ii. — 269, i. —
 285, ii. — 286, i, ii. — 294, i. —
 295, i. — 313, i. — 314, ii. —
 323, ii. — 324, i. — 341, i. —
 356, i. — 384, ii. — 409, ii. —
 489, ii. — 494, ii. — 497, ii. —
 499, ii. — 529, ii. — 548, i. —
 557, ii. — 621, i. — 668, ii. —
 769, ii.
Scilla, 435, i.
Scincus, (*Scink*) 527, ii.
Sclarea, 435, i.
Scolopax, vid. *Gallinago*,
 509, i.
Scolopendra, 527, ii.
Scolimus, vid. *Cinara*, 290,
 ii. — *Theophrasti*, 435, ii.
Scolymus, 291, i.
Scombor, 527, ii.
Scorbutic-whey, 696, i.
Scordium, 435, ii. — Elec-
 tuary of, without Opium,
 715, ii. — with, 716, i. —
Scorodania, 436, i.
Scorodaprasum, vid. *Allium*,
 216, i. — 219, i, ii.
Scorpiæ, 527, ii.
Scorpion, 527, ii. — Fidi,
 528, ii. — Wort, 390, i.
Scorpius, 528, i. — vid.
Genista, 323, ii.
Scorzonera, 436, i, ii.
Scrophularia, 437, i, ii.
Scrophulous and strumous
 Disorders, 307, i. — 309, ii. —
 397, i. — 407, i. — 511, i. —
 525, i. — 531, ii. — 682, i.
Scrotum, Swellings of the,
 305, i.
Scurf, 560, ii.
Scurvy, how generated, 17,
 ii. — 23, ii. — Preservatives
 against it, 148, ii. — 154, i.
 — 200, i. — 201, i. — to
 cure, 212, ii. — 218, i. —
 228, ii. — 235, ii. — 239, ii. —
 246, i. — 250, ii. — 257, ii. —
 258, ii. — 260, i. — 261, ii. —
 267, i. — 270, ii. — 274, i. —
 276, ii. — 287, i. — 288, i. —
 296, i, ii. — 321, ii. —
 353, i. — 366, ii. — 371, i. —
 374, i. — 378, i, ii. —
 381, ii. — 382, ii. — 383, ii. —
 402, ii. — 410, ii. — 416,
 ii. — 417, i. — 422, ii. —
 423, i. — 443, i. — 445, i. —
 446, ii. — 461, i. — what,
 463, ii. — 465, ii. — 466, i. —
 472, i. — 474, i. — 482, i. —
 552, i. — 589, i. — 647, ii. —
 668, ii. — 670, i. — 675, ii. —
 711, i. — 764, i. — 801, ii. —
 828, i. — 835, i, ii. —
 Juices against, 706, ii.
Scurvy-grass, Garden, and
 Sea, 296, ii. — *Scottish*,
 260, i. — Spirit of, 648, ii.
Scutellaria, 437, i.
Sea-grape, 314, i. — green,
 Water, 449, i. — Lungs,
 526, i. — Sickneſs, 303, i.
 — Wrack, common, and
 purple, 321, i.
Seal, 508, i. — or Sea-calf,
 525, i.
Sebeſten, 437, i.
Secale, 437, ii.
Secundines, to expel, 236, ii.
 — 237, i. — 239, i. — 251,
 ii. — 256, i. — 268, ii. —
 270, i. — 304, i. — 356, i. —
 368, ii. — 375, ii. — 389, i. —
 399, ii. — 423, ii. — 424, i. —
 448,

I N D E X.

- 448, i. —468, ii. —482, i. —494, i. —507, i. —516, i. —519, i. —522, ii. —681, ii.
- Securidaca*, 437, ii.
- Sedum*, 437, ii. —438, i.
- Seeds, the four greater and four lesser hot, 622, ii. — four greater cold, ib. — four lesser cold, 623, i.
- Seggrum*, 344, i.
- Selenites*, (Selenite) 589, ii.
- Self-heal, 411, i.
- Selinum*, 438, i.
- Semen*, 438, ii.
- Seminal Juices, to increase, 416, ii. — to consume, 423, ii. — 508, ii. — to increase, 524, ii. — 531, ii. — to restrain, 550, ii. — Secretions, 486, i. — Weaknesses, 664, i.
- Sempervivum*, vid. *Sedum*.
- Senna*, 439, i, ii. — *Alexandrian*, 439, i. — *Bastard*, 208, ii. — *Italian*, 439, ii. — *Scorpion*, 313, ii. — common, Infusion of, 692, ii. — Four-ounce, ib. — with Lemon, ib. — Compound Powder of, 714, i. — Tincture of, 682, ii.
- Sena-leaves*, 138, i.
- Senecio*, vid. *Erigerum*, 314, ii. — *Asiaticum*, 438, ii.
- Senses, lost, to restore, 253, i. — to fortify, ii. — to quicken, 583, i. — 609, i.
- Sepia*, 528, i.
- Seps*, (Serpent) 528, i. — *Indian*, ib. — *Sea*, 529, ii.
- Serapias*, 439, i.
- Serpens*, 528, i, ii. — 529, ii.
- Serpentaria*, 440, i, ii. — *Nigra*, vid. *Asarum Virginianum*, 241, ii.
- Serpents, Venom of, 260, i, ii. — 261, i. — 271, ii. — 283, i. — 312, i. — 317, ii. — 320, ii. — 321, i. — 323, i. — 355, ii. — 357, ii. — 389, ii. — 408, i. — 413, i. — Bites of, 441, i. — 460, ii. — 479, ii. — 490, ii. — 508, i. — 510, ii. — 511, i. — 522, ii. — 526, ii. — 528, i, ii. — 529, i, ii. — 583, i.
- Serpentinus*, 583, i.
- Serpyllum*, 440, ii. — 441, i.
- Serratula*, 441, i.
- Service, or Sorb-tree, wild, 392, i. — 446, ii.
- Serum*, to correct, 835, i.
- Serum Aluminosum*, 695, ii.
- *Scorbuticum*, 696, i.
- Sesamoides*, 441, i.
- Sesamum*, 441, ii.
- Seseli*, 441, ii. — 442, i.
- Setter-wort, 340, i.
- Shadow-fish, 534, i.
- Shark, white, 493, i.
- Sheep, 523, i.
- Shell-drake, 534, ii.
- Shell-fish, 504, i.
- Shepherd's-nettle, 135, i. — Pursue, 265, i. — Rod, 310, i.
- Shingles, 302, i.
- Shoar-fish, 529, ii.
- Shrimp, 531, i.
- Sideritis*, 442, i.
- Sighings, 212, ii.
- Sight, 208, i. — 214, i, ii. — 229, i. — 251, i. — 307, i. — 308, i. — 311, ii. — 319, i. — 321, ii. — 326, i. — 341, ii. — 362, ii. — 395, ii. — 413, i. — 421, ii. — 423, ii. — 441, ii. — 445, ii. — 463, ii. — 469, i. — 477, ii. — 484, ii. — 488, i. — 498, i. — 505, i, ii. — 507, ii. — 509, ii. — 510, i, ii. — 516, ii. — 518, i. — 519, i. — 520, i. — 523, i. — 524, i. — 528, i, ii. — 529, ii. — 534, i, ii. — 564, ii. — 568, i. — 584, ii. — 586, i. — 660, ii. — 834, i.
- Sigillum*, Sol. vid. *Polygonatum*, 442, i.
- Siler Mont.* vid. *Seseli vulg.* 442, i.
- Silex*, 589, ii.
- Siligna*, 442, ii.
- Siliquastrum*, 442, ii.
- Silk-vetch, 244, ii. — Worm, 487, ii.
- Silver, 542, ii. — Marcasite of, 547, i.
- Silurus*, 529, ii.
- Sima Ruba*, 442, ii.
- Simia*, 529, ii.
- Simple Ointment, 752, i.
- Simples used in Medicine, 200. — Rules for Gathering, 624.
- Simson*, 314, ii.
- Sinapi*, 442, ii. — 443, ii.
- Sinapismus simplex*, (Sinapism, simple) 760, ii. — *Compositus*, (comp.) 761, i.
- Sinews, Contractions of, 249, ii.
- Sisarum*, 443, ii.
- Sissymbrium*, 443, ii.
- Sisyrrinchium*, 444, i.
- Sium*, 444, i.
- Skin, Disorders of, 208, ii. — 244, i. — to make it white, 247, i. — Chops in it, ib. — Spots in it, 255, i. — 256, ii. — to smoothe, 260, i. — 266, i. — free it from Wrinkles, ib. — Defecations, 346, i. — to beautify, ib. — Spots, 348, ii. — 383, ii. — 394, i. — Diseases of, 399, ii. — 444, i. — Deformities of, 481, i. — Spots of, 508, ii. — Abrafations of, 525, ii. — Spots of, 528, i. — to smoothe, 551, i. — 583, ii. — to whiten, 594, i. — 792, ii. — to preserve from Cold, 794, ii. — 795, ii. — Diseases of, 812, ii.
- Skirret, 443, i. — Syrian, ib.
- Slate, *Irish*, 565, ii.
- Sleep, to procure, 230, i, ii. — 231, i. — 250, i. — 252, i. — 342, ii. — 343, i, ii. — 347, i. — 351, ii. — 387, i. — 394, ii. — 395, i. — 399, ii. — 426, ii. — 449, i. — 476, ii. — 509, ii. — 520, ii. — immod. to prevent, 523, i. — to procure, 545, i. — 562, i. — 791, ii. — 792, i.
- Sleeve of Hippocrates, what, 114, ii.
- Sloe, or Black-thorn, 411, ii.
- Sloes, Conserve of, 708, ii. — Juice of, 706, ii.
- Smallage, 234, ii.
- Small-pox, Eruptions of, promoted, 38, ii. — to cure, 213, i, ii. — 218, i. — 235, i. — 245, ii. — 255, ii. — 269, i. — 270, i. — 304, i. — 317, ii. — 319, i. — 423, ii. — 434, ii. — 436, ii. — 440, i. — 461, ii. — 501, i. — 530, ii. — 541, ii. — 568, i. — 618, i. — 647, ii. — 790, ii. — 826, i. — 827, i. — 828, ii. — 835, i.
- Smaragdus*, (Smaragd) 589, ii.
- Smaris*, 530, i.
- Smilax Arb.* vid. *Hex*, 344, ii. — *Aspera*, & *Lævis*, 444, i. — *Hortensis*, vid. *Pbaseolus Vulg.* 340, i.
- Smyris* & *Smerillus*, 590, i.
- Smyrniacum*, 444, ii.
- Snail, 503, i. — *Paris Garden*, Water, and Sea, ii. — black, and red, 516, ii.
- Snake-

I N D E X.

- Snake-root, *Virginian*, 440, i. — *Senekka-rattle*, ib. — Tinctures of 673, ii. — Compound, 674, i.
- Snake-weed, black, 241, ii. — or Bistort, 255, i. — Wood, 357, ii.
- Snap-dragon, 234, i.
- Sneeze-wort, 413, i.
- Sneezing, excessive, to stop, 206, i. — 230, i. — to excite, 246, i. — 413, i. — 442, ii. — 499, i.
- Sneezing-powder, 712, i.
- Snipe or Snite, 509, i.
- Soap, 606, ii. — Soap, *Sapo Terra*, its Parts and Effects, 111, ii. — Berries, 476, i. — of Glass, 509, ii. — *Helmont's*, 741, ii. — Leys, 786, ii. — Lohoch of, 725, i. — Pills, 731, i. — Plaister, 758, i. — Wort, 431, i.
- Solanum*, 444, ii. — 445, ii. — *Letbale*, vid. *Belladonna*, 252, ii. — *Tuberosum*, vid. *Battata Virgin.* 251, i. — *Vesicarium*, vid. *Alkekengi*, 214, i.
- Soldanella*, 445, ii. — 446, i.
- Solidago*, vid. *Doria*, 310, i.
- Soldiers and Sailors, 216, ii.
- Solomon's Seal*, 408, ii.
- Solutive Honey, 704, ii.
- Sonchus*, 446, i.
- Soot, 321, i. — Spirit, Salt, and Oil of, 793, i. — Tincture of, 666, ii.
- Sophia*, *Chirurg.* 446, i.
- Sorbus*, 446, ii. — *Torminalis*, vid. *Crataegus*, 302, i.
- Sores, running, 812, ii.
- Sorghum*, 446, ii.
- Sorrel, 204, ii. — 205, i.
- Sory, vid. *Chalcitis*, 557, i.
- Southern-wood, 201, i.
- Sow-bread, 239, i. — common, ib. — 306, ii. — Thistle, prickly, 446, i. — smooth, ib.
- Sows, 519, ii.
- Sparganium*, 446, ii.
- Sparrow, House, 524, i.
- Sparrow-grass, 242, i. — wild, and Rock, 243, i.
- Spartium*, vid. *Genista Juncea*, 323, ii.
- Spasmus*, 146, ii. — 208, ii. — 238, ii. — 244, i. — 252, i. — 286, ii. — 294, ii. — 336, ii. — 366, ii. — 376, i. — 416, ii. — 426, i. — 481, ii. — 526, ii. — 559, i. — 582, i. — 651, ii. — 710, ii. — 789, ii. — 792, i.
- Spatula Fœtida*, vid. *Tris Fœtida*.
- Spear-mint-water, spirituous, 644, ii.
- Spear-wort, great, 416, i.
- Species Aromaticæ*, 714, i. — *Hieræ Picræ*, 115, i. — 2
- Scordio sine Opio*, ii. — cum Opio, 716, i.
- Speedwell, male, 465, i. — Germaner, 466, ii.
- Sperma Ceti*, Lohoch of, 725, ii.
- Spell, 326, ii. — 512, i.
- Spelia*, vid. *Zea*, 472, ii.
- Sperma Ceti*, 530, i.
- Sphacelus*, 271, ii. — 273, ii. — 786, i.
- Sphondylium*, 447, i.
- Spina Nardi*, vid. *Nardus Indica*, 378, i. — *Vulgaris*, vid. *Lavendula*, 353, ii.
- Spina Alba*, 447, i. — vid. *Echinopus*, 311, ii. — *Ara-bica*, 312, i. — *Cervina*, & *Infectoria*, vid. *Rhamnus Catharticus*, 418, ii.
- Spider, 484, i. — black, ii.
- Spider-wort, 400, ii.
- Spignel, 372, ii. — Bastard, 319, ii. — German, or Mountain, ib.
- Spike, 354, i.
- Spikenard, Celtic, 377, ii. — Indian, and Mountain, 378, i. — *Plowman's*, 476, ii.
- Spinachia* (Spinache) 447, i.
- Spindle-tree, 315, ii.
- Spiræa*, 447, ii.
- Spirit of Vinegar, 659, ii.
- Spirits, Animal, 773, ii. — 811, ii. — to purify, 208, i. — 229, ii. — to chear, 280, i. — 282, ii. — 287, ii. — 297, i. — 302, ii. — 326, i. — 354, i. — 410, ii. — 421, ii. — 469, ii. — 499, i. — 508, i. — 523, ii. — 528, ii. — 589, ii. — 609, i. — 653, ii. — 763, ii. — 764, i.
- Spirits by Distillation, 648, & seq.
- Spiritus Pezæoticus Buffii*, 650, ii. — *Cocleariæ*, 648, ii. — *Cornu Cervi*, 787, i. — *Fulginis*, 793, i. — *Lavendulæ Simplex*, 649, i. — *Lavendulæ Compositus*, ib. — *Matricalis*, 650, ii. — *Man-*
- derari*, 654, i. — *Nitri*, 800, ii. — *Glauberi*, ib. — *Dulcis*, 801, i. — *Salinis Aromaticis*, 652, ii. — *Salis*, 795, i. — *Ammoniaci*, 793, i. — *dulcis*, 794, i. — 798, ii. — *Glauberi*, 796, i. — 798, i. — *Marina coagulatus*, 798, ii. — *Succini*, 810, ii. — *Sulphuris per Campanam*, 807, ii. — *Vini Camphoratus*, 686, i. — *Vini Rectificatus*, 648, i. — *Vitrioli*, 802, ii. — *dulcis*, 803, i. — 804, i. — *Volatilis Aromaticus*, 653, i. — *Fœtidus*, 654, i.
- Spleen, Disorders of, 34, i. — 208, ii. — 245, i. — 248, i. — 250, ii. — 260, i. — 275, i. — 276, ii. — 277, i. — 284, i. — 288, i. — 290, i. — 306, i. — 307, ii. — 309, ii. — 311, ii. — 313, i. — 315, i. — 318, ii. — 319, i. — 320, i. — 321, ii. — 323, ii. — 327, i. — 333, i. — 336, ii. — 340, ii. — 347, i. — 349, i. — 359, i. — 360, i. — 364, i. — 367, i. — 368, i. — 378, i. — 385, i. — 390, i. — 426, i. — 429, ii. — 443, i. — 446, ii. — 452, i. — 453, ii. — 454, ii. — 460, ii. — 475, i. — 477, ii. — 497, ii. — 506, i. — 510, i. — 511, ii. — 519, ii. — 522, i. — Tumour of, 523, ii. — 531, i. — 534, ii. — 539, i. — 563, i. — 619, i. — 660, ii. — 792, ii.
- Spleen-wort, 244, i. — rough, 360, i.
- Splinters, to draw out, 377, ii. — 515, ii. — 516, ii. — 522, i. — 529, ii.
- Spodium*, vid. *Elephas*, 506, ii. — *Græcorum*, 590, ii.
- Spongia*, 447, ii.
- Spets of the Skin, how taken away, 74, i.
- Springs, mineral, 139, ii.
- Spuma Maris*, 561, ii.
- Spunge, 447, ii. — Burning of, 627, ii. — Bastard, 474, ii. — hard, thready, tuberos, and vermiculate, 475, i. — of the Marshes, bastard, 207, ii.
- Spurge, Sea-heath, 314, i. — Heath, 429, ii. — *German*, Pine, Garden, 457, ii. — Sun,

—Sun, Wood, Myrtle, Evergreen Wood, 458, i. — rough-fruited, Sea, Cyprus, ii. — Tree, broad-leaved, Pine with sharp-pointed Leaves, Petty, purple Sea, 459, i. — Thyme, and round-knobbed-rooted, ii. Spurge-flax, 456, i. — Laurel, and Olive, ib. Squamaria, 448, i. Squatina, 531, i. Squill, or Sea-onion, 435, i. Squilla, 531, i. Squills, Baking of, 627, i. — Exiccation of, ii. — Oxyriel of, 705, i. — Pills of, 731, i. — Syrup of, 702, ii. — Troches of, 734, i. — Vinegar of, 660, i. Squinancy-wort, 422, i. Stachys, 448, i. Stabe, vid. Jacea, 344, i. Staff-tree, 213, i. Stag, 499, i. Stag-fly, 527, i. Stagnation of Humours, 578, i. Stannum, 590, ii. — Pulveratum, 811, ii. Staphis, 448, i. Staphylodendron, 448, i. Staphyloma, 567, ii. Star of Bethlehem, 480, ii. Starch, 227, ii. — Lohoch of, 724, i. Star-gazer, 534, i. Star-Gem, 545, i. — Stone, 309, i. Star-wort, golden, 244, ii. — Sea, 461, ii. Stare, or Starling, 531, ii. Starkey's Pills, 730, ii. Stave's-acre, 448, i. Steatites, 558, ii. Steel, 570, ii. — prepared with Sulphur, 814, i. — tartarified, 813, ii. — Tincture of, 669, i. — Ludovicus, ii. Steel-rust prepared, 813, ii. Stella Lapis, 300, i. Stellaris Lapis, 345, i. Sterility, 165, i. — 208, ii. — 214, ii. — 225, i. — what may cause it, 231, i. — 243, i. — to prevent, 291, i. — 379, i. Sternutation, 652, ii. Sticking Plaisters, 754, ii. Stick-lac, 346, ii. — Seed-lac, and Shell-lac, 347, i. Stings of Scorpions, 245, i. —

414, ii. — 446, i. — 459, ii. — of an Hornet, 503, i. — Scorpions, 515, ii. — 517, i. — 527, ii. — 530, i. — of Wasps, 354, ii. — Scorpions, 361, i. — 370, ii. — 373, i. — 390, i. — 511, i. Stitch-wort, 329, i. Stock-gilly flower, 356, i. Stoechas, 448, i. iii. — Citrigna Germanica, vid. Helichrysum, 336, ii. Stomacace, 260, ii. — 261, ii. Stomach, Weakness of it, cured, 39, i. — Disorders of, how produced, 65, ii. — relieved, 135, i. — 148, ii. — 208, ii. — 211, i. — 216, i. ii. — 217, i. — 221, i. — 225, ii. — 227, i. — 230, ii. — 232, ii. — 233, ii. — 241, i. — 244, ii. — 246, ii. — 250, ii. — to corroborate, 254, i. — 256, ii. — 257, ii. — Diseases of, 260, ii. — 267, ii. — 274, ii. — 275, i. — 276, ii. — 277, i. — 279, ii. — 280, i. ii. — 281, i. ii. — 282, i. ii. — 284, i. ii. — 289, i. — 291, ii. — 292, i. — 293, ii. — 296, i. — 300, i. ii. — 301, i. ii. — 302, ii. — 305, i. — 306, ii. — 307, ii. — 310, ii. — 314, ii. — 319, i. — 320, i. — 322, ii. — 324, ii. — 325, ii. — 332, i. — 341, i. — 346, ii. — 347, ii. — 355, ii. — 357, i. — 358, ii. — 363, i. — 366, ii. — 368, i. — 372, ii. — 377, ii. — 379, i. — 383, ii. — 394, i. ii. — 398, ii. — 412, i. — 418, ii. — 426, i. — 421, ii. — 422, ii. — 425, i. — 422, ii. — 443, i. ii. — 449, ii. — 451, ii. — 452, ii. — 460, i. — 469, ii. — 472, ii. — 473, ii. — 477, i. — 485, i. — 489, ii. — 499, i. — 505, i. ii. — 506, i. ii. — 507, i. — 508, ii. — 519, ii. — 531, i. — 559, ii. — 567, i. — 571, ii. — 581, ii. — 595, i. — 605, ii. — 618, ii. — 637, ii. — 642, i. ii. — 660, ii. — 670, i. — 674, i. — 676, ii. — 684, i. — 692, i. ii. — 697, ii. — 726, ii. — 744, i. — 782, ii. — 792, ii. — 834, ii. Stomach-pills, 731, ii. — Plaster, 749, i. — Stomachic Elixir, 683, i. — Tincture, 674, i. ii. Stone, Eagle, 537, i. — Star,

545, i. — Jew's, 562, i. — Armenians, Asian, ii. — Toad, 563, i. — Milk, 564, i. — Bastard Eagle, Blood, ii. — Azure, 565, ii. — Honey, Memphis, 566, ii. — White-marking, Nephritic, Phrygian, cleaving, 567, i. — Spunge, ii. — Green, and Small-pox, 568, i. — another, white-marking, 569, ii. — Spleen, 583, i. — green, 586, i. — red-marking, ii. — Unicorn, 600, i. — Stone, 214, ii. — 217, i. — 218, i. — 223, i. — 226, i. ii. — 229, i. — 233, ii. — 235, ii. — 238, i. — 250, ii. — 251, i. — 252, i. — 255, i. — 256, ii. — 262, i. — 267, i. — 268, i. — 277, ii. — 282, i. — 284, ii. — 289, ii. — 294, i. — 302, ii. — 305, ii. — 308, i. ii. — 315, i. — 318, ii. — 323, ii. — 327, i. — 328, i. ii. — 341, ii. — 343, ii. — 348, i. — 351, ii. — 352, ii. — 359, i. — 360, i. — 362, ii. — 366, ii. — 368, ii. — 371, ii. — 378, i. — 379, ii. — 382, ii. — 389, i. — 390, i. — 392, i. — 395, ii. — 396, ii. — 398, i. — 399, i. — 401, ii. — 402, i. ii. — 410, ii. — 413, i. — 417, i. — 422, ii. — 433, ii. — 443, ii. — 444, i. — 446, ii. — 452, i. — 460, i. ii. — 465, i. ii. — 475, i. — 481, i. — 485, ii. — 486, ii. — 497, ii. — 498, ii. — 499, i. — 500, i. — 502, i. — 503, ii. — 507, i. — 509, ii. — 511, ii. — 512, i. — 513, i. — 516, i. ii. — 517, i. ii. — 518, ii. — 519, ii. — 520, i. — 521, ii. — 522, i. — 523, i. ii. — 524, i. ii. — 526, i. — 528, i. — 532, i. — 533, ii. — 535, i. — 547, i. — 560, ii. — 562, i. — 567, ii. — 568, i. — 570, ii. — 589, ii. — 606, i. — 620, i. — 690, ii. — 697, i. — 713, i. — 742, ii. — 773, ii. — 784, i. — 797, i. — 801, ii. Stone-gluer, 568, ii. Stones, in human Bodies, how their Concretion prevented,

vented, 92, i. — 161, ii. — 165, i. — 173, ii. — expel, 206, ii. — 208, iii. —
 Steeds, bloody, 390, i. —
 Storax, Straining of, 627, ii. —
 — Gum, Oil of, 769, i. —
 — Pills, 731, ii. —
 Storax-tree, 449, i. —
 Stork, 522, i. —
 Strains, 365, i. — 747, i. —
 758, i. —
 Stramonium, 443, ii. —
 Strangles, in an Horse, 505, i. —
 Stranguries, how arise, 19, i. —
 — 61, ii. — to relieve, 206, ii. —
 — 215, i. — 225, i. —
 — 230, ii. — 240, ii. — 251, i. —
 — 294, ii. — 299, ii. —
 — 308, ii. — 334, ii. — 340, i. —
 — 377, i. — 386, ii. —
 — 389, i. — 396, ii. — 402, ii. —
 — 433, ii. — 438, i. —
 — 441, ii. — 443, ii. — 446, i. —
 — 460, i. — 479, ii. —
 — 481, i. — 492, ii. — 497, i. —
 — 620, i. — 714, ii. — 797, i. —
 Stratiotes, 449, i. —
 Strawberry-berries, 320, i. —
 Strawberry-tree, 476, i. —
 Strength, 225, ii. — 249, i. —
 — 439, ii. — 508, ii. —
 — 618, ii. — 790, ii. —
 Strengthening Plaster, 758, ii. —
 Strictures, 364, i. —
 Struma's, 446, ii. — 489, ii. —
 — 572, ii. — 627, i. —
 Struthium, vid. Luteola, —
 — 361, i. —
 Struthio, 531, i. —
 Stupors, 208, ii. — 387, ii. —
 — 394, ii. — 495, ii. —
 Surgeon, 531, i. —
 Sturis, 531, i. —
 Sturnus, 531, ii. —
 Styes, 589, ii. —
 Styptic Powder, 714, ii. —
 Tincture, 674, ii. — Water, 658, ii. —
 Sydrax, 449, i. —
 Syber, 450, i. —
 Sublimation described, 124, 125, — proper Vessels for it, 125, i. —
 Succr Antiscorbutici, 706, ii. —
 Succinum, & Carabe, 590, ii. —
 Succinum Nigrum, 560, ii. —
 Succisa, vid. Morsus Diaboli, 373, ii. —
 Succory, Gum, 289, i. ii. —
 — wild, and Garden, 290, i. —

bulbous, 309, i. — Bastard, 441, ii. —
 Succory, with Rhubarb, 698, ii. —
 —
 Sucus Glycyrrhizæ, 706, ii. —
 — Prunorum Sylvestrium, seu Acacia Germanica, 706, ii. —
 Sucking-fish, 526, ii. —
 Sadorific, 339, ii. — 679, i. —
 Sadorific Tincture, 677, i. —
 Suffocation, how produced, 19, i. —
 Suffusions, 501, ii. —
 Sugar, Syrup of, 702, ii. —
 Sugar-cane, 424, i. —
 Sugars, 709, i. —
 Sugillations, 305, i. — 313, ii. —
 — 318, i. — 344, i. — 353, ii. —
 — 416, i. —
 Sulphur, 592, i. —
 Sulphur and Inflammability described, 125 to 127. —
 Sulphur Auratum Antimonii, 831, i. —
 — Precipitatum, 309, ii. —
 Sulphur, Balsam of, with Oil of Turpentine, 810, i. —
 — Simple Balsam of, 809, ii. —
 — Flowers of, 807, i. — washed, ii. —
 — Liver of, 808, ii. —
 — Milk of, 809, i. —
 — Ointment of, 753, i. —
 — Precipitated, 809, ii. —
 — Preparations of, 807, i. —
 — Spirit of, by the Bell, 807, ii. —
 — Troches of, 734, ii. —
 Sulphurated Water, 808, ii. —
 Sumach, vid. Rhus Obanionum, 419, ii. —
 — common, ib. —
 — Venice ex red, 301, ii. —
 Sun-burning, 207, ii. —
 Sun-burns, 223, i. — 224, ii. —
 — 228, i. — 348, ii. —
 Sun-flower, 300, ii. — 318, ii. —
 — draf, 336, ii. —
 Suppurating Cataplasm, 760, ii. —
 Suppurations, 439, i. — 445, i. —
 — 479, ii. —
 Surgeon, his Province, 2, ii. —
 Sus, vid. Parcus, 525, i. —
 Swallow, 510, ii. —
 — Indian, 511, i. —
 Swallow-wort, 241, ii. —
 Swin, 505, i. —
 Sweat, to excite, 240, ii. —
 — 241, ii. — 265, i. — 312, i. —
 — 320, ii. — 332, i. — 347, i. —
 — 372, ii. — to check, 376, ii. —
 — 386, ii. — 429, i. — 444, i. —
 — 463, i. — 486, ii. — 531, i. —
 — 632, i. — 633, i. — 660, ii. —

782, ii. — 792, i. — 801, ii. —
 828, i. — 833, i. —
 Sweet-hoof, Constantinople, 487, ii. —
 Swellings of the Guts, 16, i. —
 — cold and glandulous, 83, ii. —
 — edematous, 136, ii. — 167, ii. —
 — stumous, 260, i. —
 — edematous, 262, ii. — 284, i. —
 — 288, i. — hard, 312, i. —
 — stumous, 323, ii. — 353, ii. —
 — 365, i. — 371, i. —
 — stumous, 398, i. — 416, ii. —
 — erysipelaceous, 428, ii. —
 — 429, i. — 441, ii. —
 — stumous, 485, i. — 497, ii. —
 — scrophulous, 509, ii. —
 — stumous, 510, i. —
 — scrophulous, 520, i. —
 — 522, ii. — 528, ii. — 531, ii. —
 — 567, ii. — edematous, 829, i. —
 Swift, 484, i. —
 Swoonings, 792, ii. —
 Sycamore-tree, Egyptian, Cyprian, 318, i. —
 Sycomorus, vid. Ficus, 317, ii. —
 Symplytum, 450, ii. — 451, i. —
 Synanchica, vid. Rubia Syn, 422, i. —
 Synscopes, 618, ii. —
 Syrups, Rules for making, 696, i. —
 Syrupus ex Albo, ii. —
 — x Al, ib. —
 — Artemisia, 697, i. —
 — e Cortice Aurantiorum, ib. —
 — e Corticibus Aurantiorum, ii. —
 — e Succo Aurantiorum, ib. —
 — Balsamicus, ib. —
 — Capilli Veneris, 698, i. —
 — Caryophyllorum, ib. —
 — de Cichoreo cum Rbeo, ii. —
 — Croci, ib. —
 — Cydoniorum, ib. —
 — Hermestis, 699, i. —
 — e Succo Limonium, ib. —
 — Myrtinus, 699, i. —
 — Papaveris Albi, seu de Meconis, vulgo Diacodium, ii. —
 — e Meconio, sive Diacodion, ib. —
 — Papaveris Erratici, 700, ii. —
 — Rbeados, ib. —
 — Pectoralis, 701, i. —
 — e Floribus Persicæ, 700, i. —
 — e Peto, sive Nicotiana, ii. —
 — Peonia, 701, ib. —
 — Pulegii, ib. —
 — Quinque Radicum, 700, ii. —
 — Rosarum Pallidarum, 702, —
 — Solutivus, ib. —
 — Rosæ siccis, ib. —
 — Sacchari, ii. —
 — Scilliticus, ib. —
 — e Stina Cervina, ib. —
 — de —, seu Rhamno Cathartico, 703, i. —

I N D E X.

2 *Symphyto*, ib.—*Violarum*,
ii.—*Zingiberis*, ib.

T.

T*Abacum*, vid. *Nicotia-*
na, 379, i.

Tabella Cardialgica, 785, i.—
Diatraccanthi, 709, ii.

Tacamabaca, vid. *Gummi Ta-*
cam, 334, ii.

Tagetes Indicus, vid. *Otbonna*,
391, i.

Talcum, 594, i.

Talpa, 531, ii.

Tamarisk, 452, i.—*German*,
ib.

Tamarind-tree, 451, ii.

Tamarinds, 140, i.—with
Senna, Decoctions of, 691, ii.

Tamarindus, 451, ii.

Tamariscus, 452, i.

Tannus, vid. *Bryonia Nigra*,
263, i.

Tanacetum, 452, i.

Tansy, 452, i.—wild, 236, i.

Tapius Barbatus, vid. *Ver-*
basum, 465, i.

Tar, 406, i.—*Barbadoes*,
584, ii.—Ointment of, 751,
ii.—Water, 659, i.

Taraxicum, vid. *Dens Leonis*,
309, i.

Tare, common, 466, ii.—
white, ib.—Strangle, 467, i.

Tares-everlasting, 353, ii.

Tarragon, 310, ii.

Tarras, 561, i.

Tartar, 613, ii.—Cream of,
784, ii.—Crystals of, 784,
ii.—Emetics, 834, i.

Harvey's, ii.—Ley of, 777,
ii.—Liquor of, or the Oil
per Deliquium, 777, i.—

Preparations of, 774, i.—
Regenerated, 778, i.—Salt
of, 777, i.—Soap of, 785,
i.—Soluble, or tartarised,
783, i.—Spirit, Oil, and
fixed Salt of, 775, ii.—Tinc-

ture of the Salt of, 675, i.—
Vitriolated, 781, i, ii.

Tartarum Emeticum, 834, i.

Tartarus, 613, ii.—*Regene-*
ratus, 778, i.—*Solubilis*,
783, i.—*Tartarizatus*, 783,
i.—*Vitriolatus*, 781, i.—
782, ii.

Taxa, 531, ii.

Taxus, 452, ii.

Tea-plant, 454, ii.

Teasel, wild, and manured,
309, ii.

Teeth, how destroyed, 62, ii.

—to fasten, 204, ii.—213,
i.—243, i.—250, ii.—255,
ii.—265, ii.—288, i.—311,
i.—348, ii.—355, ii.—362, i, ii.

379, ii.—392, ii.—427, ii.—
447, ii.—466, ii.—468, i.—
475, i.—to cleanse, 485, ii.—
499, i.—to extract, 515, ii.—
to whiten, 516, i.—to fasten,
557, i.—cleanse, 607, ii.—660,
ii.—668, ii.—801, ii.—to
fasten, 807, i.

Teebium, 452, ii.

Tellina, 532, i.

Tench, 532, ii.

Tendons, 450, ii.—451, i.—
482, i.—493, i.—505, i.—
526, ii.—527, i.—795, ii.

Tenesmus, 151, ii.—320, i.—
348, i.—399, i.—457, i.—
464, ii.—488, i.—509, ii.

Terebinthina, 452, ii.

Teredo, 532, i.

Terms, Suppression of the,
372, i.

Terra Japonica, 594, i.—
Lemnia, 595, i.—*Lemnia*
alba, *Melitea*, 596, i.—
Noceriana, *Portugallica*,
Samia, *Sicula*, *Sigillata*
Magni Ducis, *Sigillata*
Livonica, ii.—*Silesiaca*,
Tripolitana, *Turcica*, *Vi-*
triosata Sigillanda, 597, i.

Tertians, 357, ii.—359, ii.—
407, ii.—506, i. 579, ii.

Testicles inflamed, 213, i.—
289, i.—290, ii.—395, i.—
492, ii.—564, ii.

Tesludo, 532, i, ii.

Tetanus, 379, ii.

Tetters, 207, ii.—*Tetters*,
289, ii.—316, ii.—397,
i.—422, ii.—437, i.—
792, ii.

Teucrium, 453, ii.

Thalictrum, 453, ii.—454, i.

Thapsia, 454, i.

Thermometers, how affected
by the Air, 9, ii.—18,
ii.—by Fire, 41, i.—the
best for measuring the De-

grees of Heat, 180, i.

Thea, 454, ii.—*Mexico*,
257, ii.

Thebaic Extract, 626, ii.—
Tincture, 671, i.

Thighs, Pains of the, to
help, 143, ii.

Theriaca Andromachi, 722,
i.—*Edinensis*, 723, i.

Thirst, violent, to allay,
205, ii.—208, ii.—254,
i.—255, ii.—272, i.—
305, i.—358, ii.—372,
ii.—374, i.—389, i.—
391, ii.—394, i.—420,
i.—421, i.—451, ii.—
463, ii.—469, ii.—498,
ii.—to provoke, 521, ii.—
to allay, 581, i.—618, ii.—
655, ii.—801, ii.

Thistle, Star, 269, i.—*St.*
Barnaby's, ii.—Thistle
upon Thistle, 277, ii.—
common creeping Way, ib.

—Lady's, 278, i.—wool-
ly-headed, ii.—*Carlina*, ib.

—holy, 294, ii.—*Pine*,
295, ii.—*Globe*, 311, ii.—
prickly, ib.—*Arabian*, 312,
i.—little *Globe*, 312, i.—
420, ii.—purging, 327, i.—
golden, 435, ii.—*Car-*
line with a Stalk, 477, ii.—
common wild, 478, i.—
melancholy, 478, ii.

Thlaspi, 455, ii.

Thora, vid. *Ranunculus*, 415, ii.

Thorax, Oppressions of the,
253, ii.—263, i.—282,
i.—303, i.—366, ii.—
390, ii.—396, ii.—402,
ii.—425, i.—460, i.—
473, ii.

Thorn, *Egyptian*, 203, ii.—
purging, 342, i.—*Box*, 361,
i.—*Indian*, 362, i.—
black, or *Sloe*, 411, ii.—
Ever-green, 414, i.—
Sallow, 418, ii.—*Ram*
with white Flowers, 419,
i.—black, ib.—white or
Haw, 447, i.—*Goat's*,
459, ii.—smaller, 460, i.

Thorn-apple, 448, ii.—
Thornback, 526, i.

Thorns, to extract, 516, ii.

Thorow-wax, 398, i.

Throat, Inflammation of,
247, i.—Tumours about
it, 252, i.—Disorders of,
275, ii.—278, i.—293,
i.—Tumours of, 356, i.—
397, i.—412, i.—466, ii.—
547, i.

Throat-wort, 459, ii.

Thrush, 533, i.

Thunder-bolts, 546, ii.

Thunus, 532, ii.

Thus, vid. *Olibanum*, 385, ii.

Thuya, 455, ii.

Thymallus, vid. *Aschia*, 484, ii.

Thymbra,

I N D E X.

- Thymbra*, vid. 432, ii.
Thyme, 456, ii. — wild, and true, ib. — Mother of, 440, i. — great, 441, i. — Lemon, ib.
Thymelæa, 456, i.
Thymus, 456, ii. — 523, ii. — 530, i.
Thyelinum, 457, i.
Tick, 527, i.
Tigris, (Tiger) 532, ii.
Tilia, 457, i.
Tin, Amalgama of, 312, i. — Case of, 311, ii. — Powdered, ib. — Salt of, ib.
Tinea, 532, ii.
Tinctura Amara, 662, i. — *Antimonii*, ib. — *Antimoniatris simplex*, 662, ii. — *Antiphibifica*, 663, i. — *Aromatica*, ib. — *Balsamica*, ib. — *Cantharidum*, 664, i. — *Cardamomi*, ii. — *Castorei*, ib. — *Cephalica*, 665, i. — *Cephalica purgans*, ib. — *Cinnamomi*, ii. — *Corticis Peruviani simplex*, ib. — *Corticis Peruviani Volatilis*, ib. — *Croci*, 666, i. — *Fœtida*, ib. — *Fulguris*, ii. — *Guaiacina Volatilis*, ib. — *Hellebori Nigri*, ib. — *Jalappa*, 667, i. — *Jalappa Composita*, ii. — *Japonica*, ib. — *Specuanthæ*, ib. — *Lacca*, 668, i. — *Martis*, 669, i. — *Martis in Spiritu Salis*, ib. — *Florum Martialis*, ib. — *Martis Ludovici*, 669, ii. — *Menthae*, 670, i. — *Myrrhae*, ii. — *Myrrhae & Aloes*, ib. — *Opi*, seu *Laudanum liquidum*, 671, ii. — *Tibetica*, ib. — *Rhabarbari*, ib. — *Rhei Amara*, ii. — *Rhei Dulcis*, 672, i. — *Rhabarbari Spirituosa*, ib. — *Rhabarbari Vinosa*, ib. — *Rosarum*, ib. — *Sacra*, ii. — *Salutifera*, 673, ii. — *Serpentaria Composita*, 674, i. — *ad Stomachicos*, ib. — *Stomachica*, ii. — *Styptica*, ib. — *Salis Tartari Harvetiana*, ii. — *Saturnina*, 663, i. — *Succini*, 676, i. — *Succini Hoffmanni*, ib. — *Sudorifica*, 677, i. — *Tolutana*, 677, ii. — *Valeriana simplex*, ib. — *Valeriana Volatilis*, ib. — *Verrucosa*, 678, i.
Tinctures, Rules for Extracting, 452, i. — 473, i.
Tin-glats, 547, i.
Tithymalus, 457, i. & seq.
Titmoufe, 523, ii.
Toad, 460, ii.
Toad-flax, 358, ii. — Ivy-leaved, ib.
Toads, Preparation of, 625, i.
Tobacco, 379, i. — *English*, 381, i. — *Syrup of*, — 701, ii.
Tobacco-pipe, Fish, 481, i.
Tolu-balsam, *Tincture of*, 677, ii.
Tongue, Dryness of the, 467, ii.
Tonfils, Affections of, 260, i. — Swellings of, 261, ii. — 344, i. — 361, ii. — 364, ii. — 386, i. — 466, ii. — 510, i. — 555, ii. — 592, i.
Tooth-ach, what Weather makes it rage, 21, i. — to help, 188, i. — 218, i. — 233, ii. — 202, ii. — 336, i. — 247, i. — 251, i. — 253, ii. — 255, ii. — 265, ii. — 273, i. — 274, i. — 276, i. — 278, ii. — 280, ii. — 309, i. — 312, i. — 323, i. — 334, ii. — 352, ii. — 355, i. — 363, ii. — 373, i. — 379, ii. — 389, ii. — 408, i. — 414, i. — 428, ii. — 443, i. — 445, ii. — 448, i. — 477, ii. — 493, i. — 498, i. — 500, i. — 506, i. — 516, ii. — 517, ii. — 524, i. — 534, ii. — 557, i. — 583, ii. — 743, i.
Tooth-wort, 309, i. — 448, i.
Tooth-shell, Dog-like, 506, i.
Topazius, (Topaz) 558, i.
Torpedo, 532, ii.
Tormentilla, (Tormentil) 459, ii.
Toques, their various Uses, 180, ii. — their general Use, 182, i. — for the Head, ii. — the Eyes, 184, i. — the Ears, 186, i. — the Nostrils, ii. — Ulcers of the *Ossa Squamæ*, 187, ii. — the Tooth-ach, 188, i. — cutaneous Disorders of the Face and Head, ii. — an Erysipelas, 189, i. — 186, i. — a *Gumma Rosacea*, ii. — the Teeth, ib. — *Thorax* 193, i. — a *Plthifis*, or Ulceration of the Lungs, ii. — the Stomach, 191, i. — the Stone, 192, i. — *Menses*, &c. 194, i. ii. — the Falling-down of the Fundament, or *Uterus*, 193, i. — the blind Hemorrhoids, ii. — the Joints, or in arthritic and gouty Pains, 194, i. — Buboes, 196, ii. — the Small-pox, 197, i. — the Itch, ib. — a particular Remark thereon, ib. ii. — the Venereal Disease, ib. — Palsies, ib. — œdomatous Tumours, 198, i. — Mistakes in applying them to the Wrists, ii.
Tortoise, Sea, or Turtle, 533, i. — Water, 532, ii. — Land, ib.
Tota-bona, vid. *Bonus Hæmicus*, 256, ii.
Touch-me-not, 247, ii.
Trachelium, 259, ii.
Tragacantha, 459, ii.
Tragopogon, 460, i.
Tragorchis, vid. *Satyrium*, 433, i. ii.
Tragoriganum, 460, i.
Transpiration, to augment, 281, ii. — 620, i.
Treacle-vinegar, 660, ii. — Water, 626, i.
Trefoil, stinking Bean, 229, i. — Shrub, 307, ii. — *Acacia*, 308, i. — Pile, 360, i. — Bird's-foot, and sweet, ii. — stinking, 461, i. — Marsh, and common, ib. — Bean, 480, i.
Tremblings, 261, i. — 391, ii. — 427, ii. — 511, ii. — 534, ii.
Tremors, 282, ii. — 343, ii. — 426, i. — 499, i. — 516, ii. — 622, ii.
Tribulus, 460, i.
Trichomanes, 460, ii.
Trifolium, 460, ii. & seq. — *Acetosum*, vid. *Acetosella*, 205, i. — *Aureum*, vid. *Hepatica*, 340, ii. — Hemorrhoidal, vid. *Lotus Hemorrhoidalis*, 360, i. — *Odoratum*,

em, vid. *Lotus Urbanicus*, ib. ii.
Triorchis, vid. *Satyrion*, 433, i. ii.
Tripolium, 461, ii.
Triffago, vid. *Chamaedrys*, 285, i. ii.
Triticum, 461, ii. — 462, i. — *Vaccinium*, vid. *Melampyrum*, 369, i.
Trituration and Levigation described, 127, 128. — *Quincy's* particular Observation thereon, 127, ii.
Troches, Rules for Preparing, 732, i.
Trochisci albi Rbafis, feu *Sief Album*, 732, i. — *Bebbici Albi*, ii. — *Nigri*, ib. — *Cypheos*, pro *Mithridatio*, 733, i. — *dicti Magma Hedyobroi*, pro *Tberiaca Andromacbi*, ib. — *de Mimio*, ib. — *de Myrrba*, ib. — *de Nitro*, ib. — *de Scilla*, 734, i. — *Scillitici*, pro *Tberiaca Andromacbi*, ib. — *de Sulphure*, ib. — *Diasulphuris*, ii. — *de Terra Japonica*, ib. — *Viperini*, pro *Tberiaca Andromacbi*, ib. — *Cardiacyci*, 735, ii.
Trout, 533, i.
Truffles, or *Trubs*, 462, ii.
Trutta, 533, i.
Tubera, 462, ii.
Tubercles, 243, ii. — 314, i. — 317, ii. — 353, ii. — 386, ii. — 392, i. — 441, ii. — 525, ii. — 563, i.
Tumors, in the Glands of the Fauces, their Rise among Spaniards, 18, i. — of the *Epigastrium* and *Hypochondrium*, 39, i. — *oedematous*, 202, i. — 204, ii. — 208, ii. — 217, i. — 229, i. — 223, i. — 228, i. — 237, i. — 242, i. — 243, ii. — 244, ii. — 251, i. — 261, ii. — cold, 262, ii. — *scrophulous*, ib. — *oedematous*, 265, i. — *scrophulous*, in Children, 270, i. — hard, 273, i. — 274, ii. — 276, i. — 284, ii. — 287, i. — of the Bones, 289, i. — *oedematous*, ib. — *scirrhous*, 290, ii. — *oedematous*, 291, ii. — watery, ib. — inflammatory, 303, ii. — 307, ii. — 314, i. — 317, ii. — 318, i. — 319,

ii. — 323, i. ii. — 329, i. — 334, i. — *strumous*, 337, ii. — hot, 341, i. — 352, i. — 354, ii. — 358, i. — 359, i. — 359, ii. — 361, i. — 368, ii. — 372, i. — 376, i. — *scrophulous*, 377, i. — *oedematous*, 379, ii. — 384, i. — 389, ii. — 390, i. — 394, ii. — 396, ii. — indurated, 399, i. — 401, i. — 408, i. — hard, 415, ii. — watry, 423, ii. — internal, 425, i. — 428, ii. — 429, i. — 430, i. — 431, i. — 438, ii. — 442, ii. — *scirrhous*, 450, ii. — *scrophulous*, 451, ii. — 456, i. ii. — 457, i. — 461, ii. — *strumous*, 465, i. — *scorbutic*, 466, i. — 468, ii. — 477, i. — 480, i. — *oedematous*, 489, i. — *scirrhous*, ii. — 490, i. — hard, 493, i. — 500, i. — 509, ii. — 511, ii. — *scirrhous*, 516, i. — 520, i. — 534, ii. — to resolve, 548, i. — 572, ii. — 582, ii. — *oedematous*, 585, ii. — hard, 593, ii. — cold, 615, ii. — 646, ii. — inflammatory, 705, ii. — arthritic, 758, ii. — cold, 795, ii. — *scrophulous*, 822, ii. — cancerous, 824, ii.
Tukpa, (*Tahip*) 462, ii.
Tunica, vid. *Caryophyllus Ruber*, 280, ii.
Tunney-fish, 532, ii.
Turbith, & *Turpetum*, (*Turbith*) 462, ii. — *French*, ib. — 454, ii. — second *Bastard*, 475, ii.
Turchesia, 597, ii.
Turdus, 533, i.
Turkey, 519, i.
Turk's-cap, 358, i.
Turmeric, 305, ii. — 416, ii. — wild, ib. — black, 355, ii.
Turneps, 239, ii.
Turner's Cerate, 746, ii.
Turnsole, 337, i. — small, and *French*, ib.
Turpentine, 452, ii. — Oil of, 769, i. — Balsam of, ii.
Turquoise, 597, ii.
Turritis, 462, ii.
Turtur, 533, i.
Tussilage, 463, i.
Tutia, 597, ii.

Tutian, or *Park-leaves*, 230, i.
Tutty, 597, ii. — Ointment of, 753, i.
Tway-blade, 477, i.
Twitchings, 261, ii.
Tympanis, 291, ii.
Tympanitis, 16, i.
Typha, 463, i.
Typhus, 506, i.

V.

V *Acca*, vid. *Bos*, 488, i.
Vaccaria, 463, i.
Vaccinia, 463, ii.
Valerian, *Greek*, 408, i. — Garden, 463, ii. — small, 464, i. — great, wild, ib. — simple Tincture of, 677, ii. — Volatile, ib.
Valeriana, 463, ii. — 464, i. — *Grieca*, vid. *Polemonium*, 408, ii.
Valerianella, 464, i.
Vanellus, 250, i. — 464, ii.
Vanellus, 533, i.
Vanilla, 464, i.
Vapours, 254, ii. — 281, ii. — 287, ii. — 326, i. — 381, i. — 441, i. — 646, ii.
Variels, Pains of, 478, ii.
Vegetables, 200 to 480 — *Chemical Preparations* of, 762.
Vegetation, its Cause described, 110, i. &c.
Venice Treacle, its Inventor, i. — its Composition, 722, i. — *Troches* for, 733, i. — 734, i. ii.
Venus's Comb, 435, i.
Veneral Disease, 223, ii. — 265, ii. — 288, ii. — 320, ii. — 330, i. — 331, ii. — 332, i. — 426, i. — 431, i. ii. — 432, i. — 436, i. — 439, i. — 444, i. — 445, i. — 462, ii. — 533, ii. — 573, i. — 682, i. — 725, ii. — 816, i. — 821, ii. — 824, ii.
Venery, to repress, 217, ii. — 212, i. — to provoke, 217, i. — 232, ii. — 242, i. — 243, ii. — 250, i. — 252, i. — 256, i. — to repress, 270, ii. — promote, 274, i. — to provoke, 283, ii. — 289, ii. — 290, ii. — 300, ii. — extinguishes, 305, i. — to stimulate, 309, i. — 314, ii. — 318, ii. — to repress, 353, ii. — to stimulate, 369, i. — 374, ii. — to repress, 377, i. — increase, 417, ii.

INDEX

ii.—435, ii.—439, ii.—443, i.—488, ii.—491, ii.—499, ii.—503, ii.—504, ii.—508, i.—511, i.—515, ii.—520, ii.—522, i.—524, i, ii.—to provoke, 526, ii.—to restrain, 526, ii.—to excite, 527, i, ii.—533, ii.—539, ii.—550, ii.—588, ii.—to check, 799, ii.
Veratrum, vid. *Helleborus Albus*, 337, ii.
Verbalcum, 464, ii.—465, i.
Verbena, 465, i.
Verdigraie, 536, i.
Vermin, to destroy, 511, ii.—573, ii.
Vermis, vid. *Lumbicus*, 517, ii.
Veronica, 465, ii.—466, ii.
Vertigoes, 238, ii.—239, i.—262, i.—265, ii.—280, i.—282, ii.—294, i.—297, i.—301, ii.—307, i.—310, ii.—326, i.—339, i.—353, ii.—358, i.—364, i.—368, ii.—370, ii.—394, ii.—421, ii.—427, ii.—428, i.—448, ii.—466, i.—468, ii.—487, ii.—498, i.—499, i.—503, ii.—524, i.—542, ii.—559, i.—621, ii.—642, ii.—660, ii.—764, i.—789, ii.—790, i.—792, ii.
Vervain, 465, i.
Vesiculae Seminales, 250, i, ii.
Vespa, 533, ii.
Vespertilio, 533, ii.
Vetch, bitter, 315, i.—tasted Horse-shoe, 317, i.—Liquorice, 327, ii.—Chickling, 353, ii.—Hatchet, 437, ii.—wild, 467, i.
Vetching Medic, 386, ii.—yellow, 466, ii.
Vetonia, vid. *Caryophyllus Ruber*, 280, ii.
Viburnum, 466, ii.
Vicia, 466, ii.—667, i.
Vicioralis, vid. *Allium*, 219, ii.
Vinegar, its Fermentation, 107, ii. to 110, —made of Malt Liquors as well as of Wines, 109, i.—110, i.—particularly described, ib.—*Galen's* Definition of it, 113, ii.—greatly attenuates, 181, i.—205, i.—hurtful to young Women, 206, i.—its good Effect, 253, i.
Vinca, 467, i.

Vincetoxicum, 467, i.
Vine, 469, i.—Currant, ib.—wild, 396, i.—white, ii.
Vinum, 616, i.—*Amarum*, 684, ii.—*Aloeticum*, *Alkalinum*, 681, i.—*Antimoniale*, 684, ii.—*Cedrinum*, 283, i.—*Chalybeatum*, 685, i, ii.—*Croceum*, 685, ii.—*Ipecacuanha*, 688, i.—*Millepedatum*, 686, i.—*Viperinum*, ib.
Viola, 467, ii.
Violets, Dame, 341, ii.—Purple, 467, i.—*Violets*, Syrup of, 703, ii.
Vipera, (Viper) 533, i.
Viperaria, vid. *Scorzonera*, 436, i, ii.
Viper-Broth, 695, i.—Wine, 686, i.
Viper's-grass, 436, i.—*Hungarian*, ii.
Vipers, Troches of, 734, ii.
Virga, 468, i.—*Passoris*, vid. *Dipsacus*, 309, ii.
Virgin Disorders, 354, i.
Viscera, Obstructions of, 238, i.—241, ii.—275, i.—298, i.—301, i.—328, ii.—348, i.—359, i.—366, ii.—394, ii.—410, ii.—456, ii.—473, ii.—506, ii.—517, ii.—519, ii.—571, i, ii.—612, ii.—619, ii.—642, ii.—675, ii.—679, i.—680, i.—781, ii.—789, ii.—828, i.—834, i.—835, ii.
Viscerals, the most considerable, 170, i.—balsamic, hew act, ii.—which good in different Cases, 171, i.—when Corroboratives to be applied, 171, ii.
Viscum, 468, ii.
Visnaga, 469, i.
Vitis, 469, i, ii.—*Alba*, vid. *Bryonia Alba*, 262, i.—*Idea*, vid. *Vaccinia*, 463, ii.—*Marina*, vid. *Fucus Folliculaceus*, 321, i.
Vitex, vid. *Agnus Castus*, 211, ii.
Vitiligo, 377, ii.
Vitulus, vid. *Bos*, 488, i.
Vitriol, 598, i.—*Acid*, 684, i.—*Calced*, 802, i.—*Dulcified*, ib.—*Dulcified Spirit* of, 803, i.—*Elixir* of, 683, i.—*Mynsicht's*, ib.—*Salt* of, 804, i.—*Spirit*, and *Oil* of, ii.
Vitriolic blue, Water, 659, i.

Vitriolum, 598, i.—*Calcedinatum*, 802, i.
Vitrum Antimonii, 829, i.—*Ceratum*, 330, i.
Viverra, 534, i.
Ulcers, to cleanse, 74, i.—203, ii.—204, ii.—cure, 206, i.—208, ii.—215, ii.—223, ii.—227, i.—234, ii.—236, i.—237, i.—243, ii.—244, i, ii.—246, ii.—247, i.—248, i, ii.—253, ii.—258, ii.—259, i.—spreading, 260, i.—phagedenic, 261, i.—in general, 261, ii.—in the Legs, ib.—in general, 264, i.—273, ii.—phagedenic and corroding, 278, i.—malignant, 279, ii.—289, i.—of the Bladder and Kidneys, ib.—malignant, 289, ii.—306, i.—in general, 307, i.—308, ii.—malignant, 310, i.—317, ii.—322, i.—323, ii.—327, i.—fetid, 341, i.—345, ii.—running, 348, ii.—putrid, 352, ii.—of the Legs, 353, i.—phagedenic, 355, ii.—359, i.—malignant, 360, ii.—putrid, 361, ii.—367, ii.—374, i.—377, ii.—fetid, 381, ii.—invererate, 382, ii.—385, ii.—malignant, 386, i.—391, i.—392, ii.—recent, 395, ii.—spreading, 397, i.—sinuous, 398, i.—invererate, 399, i.—lordid, ib.—malignant, 399, ii.—400, ii.—407, i.—409, i.—internal, 409, ii.—invererate, 411, i.—old, 416, ii.—spreading, 419, i.—internal, 425, i.—430, i.—fistulous, 434, i.—435, ii.—437, i.—sinuous, 437, ii.—438, i.—441, i.—445, i.—and sanious, 446, i.—448, i.—malignant, 451, i.—453, i, ii.—running, 455, ii.—463, i.—malignant, 468, i.—strumous, 469, i.—putrid, 478, i.—480, ii.—foul, 483, i.—484, i.—492, ii.—malignant, 493, i.—501, i.—503, ii.—504, i.—506, i.—old, 508, i.—varicose, 510, i.—fetid, ib.—516, ii.—scrophulous, 527, i.—phagedenic, 530, i.—534, i.—cancerous, ii.—to dry, 536, i.

—malignant, 540, i. —541, ii.
 —fordid, 551, i. —run-
 ning, ib. —to cicatrize,
 555, ii. —to dry, 556, i.
 —559, ii. —560, i. —
 stubborn, 560, ii. —563, ii. —
 565, i. —567, i, ii. —570,
 i. —572, ii. —586, i. —
 small, 593, ii. —599, ii. —
 running, 607, ii. —sinuous
 and fistulous, 608, ii. —
 612, ii. —646, ii. —chronical,
 656, i. —foul, 657, i. —
 658, i. —eating, ii. —foul,
 670, ii. —675, ii. —679,
 i. —704, i. —743, ii. —
 744, ii. —fordid, 745, i. —
 callous, 748, i. —corrosive,
 749, i. —foul, 783, ii. —
 cancerous, 790, ii. —to
 dry, 807, ii. 810, i. —
 811, i. —venereal, 819, i.
 —inveterate, ib. —callous,
 822, ii. —venereal in the
 Nose, 825, ii. —
 Ulmaria, 469, ii.
 Ulmus, 470, i.
 Ulula, 534, i.
 Umbilicus Veneris, vid. Co-
 tyledon, 302, i.
 Umber, 484, ii.
 Umbra, 534, i.
 Unctions, their Use, 182, i.
 Unguentum Ægyptiacum, 745,
 i. —Album, ib. —Album
 Campboratum, ib. —ex Al-
 thea, 748, ii. —Antipho-
 ricum, 745, ii. —cum
 Mercurio, ib. —seu Lini-
 mentum Arcei, 746, i. —
 Basilicon, ib. —Basilicon
 Auzum, ib. —Nigrum,
 vel Terrapharmicum, ii. —
 de Lapide Calaminari, ib. —
 Cæruleum fortius, 747, ii.
 —mitius, ib. —Ci-
 trinum, 748, i. —Dialtheæ,
 ii. —Diapompholygas, ib. —
 Desiccariuum rubrum, 748,
 i. —de Gummi Elemi, 746,
 i. —Epispasticum, 749, i.
 —Mercuriale, 748, i. —
 de Mercurio præcipitato, 749,
 i. —Nutritum, 750, i. —
 Nervinum, 749, ii. —Oph-
 thalmicum, 750, i. —
 Stomæi, ii. —de Pice, 751,
 ii. —Populeon, ib. —Rasa-
 ceum, vulgò Pomatum, 752,
 i. —Sambucinum, ib. —
 Saturninum, vulgò Balsa-
 mum Universale, ii. —Sim-

plex, 752, i. —de Sulphure,
 753, i. —Tripharmacum,
 750, i. —Tutia, 753, i. —
 Vermifugum, ii. —ad Ve-
 scatoria, 749, i. —Viride,
 746, ii. —
 Unguis Odoratus, vid. Blatta
 Byzantina, 487, ii.
 Unicornu, vid. Monoceros,
 (Unicorn) 520, i.
 Unicornu Minerale, 548, ii. —
 Fossile, 599, ii.
 Universal Balm, 752, ii.
 Voice, the Defects of, 258,
 i. —to render clear, 259,
 ii. —305, i. —414, i. —
 660, ii.
 Volatile Liniment, 754, i. —
 Plaster, 759, i. —Epi-
 them, 760, i.
 Volatilization, or Volatiles
 described, 128, 129.
 Vomiting, obstinate, how
 cured, 73, i. how stoppt,
 137, ii. —220, ii. —255,
 ii. —to provoke, 264, ii. —
 to stop, 280, ii. —296, ii. —
 301, i. —306, ii. —329,
 i. —343, ii. —347, i. —
 355, ii. —358, ii. —371,
 i, ii. —383, i, ii. —385, ii.
 —391, ii. —421, i. —422,
 ii. —421, i. —431, i. —441,
 i. —463, ii. —469, i, ii. —
 473, i. —508, ii. —595, ii. —
 605, ii. Idiopathic, 619, i. —
 to provoke the best Way,
 634, i, ii. —to prevent,
 637, ii. —639, ii. —Bili-
 ous, 655, ii. —684, i. —
 to excite, 789, ii.
 Voracity, preternatural, 618,
 ii.
 Upupa, 534, i.
 Urinoscopus, 534, i.
 Urchin, 506, ii. —great
 Sea, i.
 Ureters, to cleanse, 282,
 i. —290, ii. —301,
 ii. —to mollify, 385, i.
 —394, i. —463, ii. —
 528, i.
 Urine, Causes hindering its
 Discharge, and what pro-
 motes it, 159 —Discharges
 involuntary to help, 174, i.
 —when Indications of a
 Fever, 179, i. —to pro-
 voke, 203, ii. —206, i.
 —209, i. —211, ii. —bloody,
 212, ii. —to restrain, ib.
 —to temperate, 215, i. —

to promote, ib. —to re-
 tain, ib. —to provoke, 216,
 ii. —218, i. —expel, 226,
 i. —provoke, 229, ii. —to
 retain, 230, i. —to ex-
 cite, 230, ii. —232, ii. —
 to expel, 233, i. —to pro-
 mote, 234, i. —237, ii. —
 bloody, 240, ii. —Incon-
 tinence of, 242, ii. —to
 promote, 244, i, ii. —
 246, ii. —250, i. —251, ii.
 —257, i. —258, i. —259, i. —
 262, i. —263, ii. —264,
 ii. —265, i. —bloody, ii.
 —268, ii. —to provoke, 276,
 ii. —277, i. —278, ii. —
 279, ii. —Heat of, 283, i.
 —to provoke, 283, i. —
 284, i. —286, i. —287, ii.
 —290, i, ii. —294, i. —300,
 ii. —302, i. —to take off
 its Heat and Sharpness, ib.
 —to provoke, ii. —305,
 i, ii. —306, i. —307, i.
 —to restrain, 307, ii.
 —to provoke, ib. —308,
 i. —310, ii. —311,
 ii. —312, i. —313,
 ii. —314, ii. —315, i, ii.
 —316, ii. —319, i, ii. —
 321, ii. —322, ii. —323,
 ii. —327, i, ii. —328, i.
 —bloody, 334, ii. —336,
 i. —341, i. —to provoke,
 341, ii. —342, ii. —347,
 i. —to provoke, 353, ii. —
 354, ii. —355, ii. —358,
 ii. —360, i. —to restrain,
 360, ii. —to provoke, 361,
 ii. —364, i. —Heat of, 366,
 ii. —369, i, ii. —370, ii.
 Heat of, ib. —to provoke,
 371, i. —372, ii. —374,
 ii. —377, i. —381, i. —
 Heat of, 382, i. —384, i.
 —to provoke, 389, ii. —
 390, ii. —397, ii. —398,
 i. —399, ii. —bloody, 400,
 i. —to provoke, 400, i, ii.
 —410, i. —Heat of, 410,
 ii. —to provoke, 413, i. —
 416, ii. —417, i, ii. —
 422, i. —423, ii. —426,
 i. —429, i. —433, ii. —
 435, i. —436, i. —Acri-
 mony of, 437, ii. —to pro-
 voke, 440, ii. —441, i, ii.
 —442, i. —443, i. —
 bloody, ib. —to excite,
 444, i. —445, ii. —446,
 ii. —448, ii. —449, i. —
 bloody,

I N D E X.

- bloody, 451. i. —to pro-
 voke, 453. ii. —456,
 ii. —457. i. —463. i. —
 bloody, 464. ii. —470. ii.
 —to excite, 475. i. —
 476. ii. —478. i. ii. —
 480. i. ii. —482. i. —
 bloody, 499. ii. —invo-
 luntary, 500. ii. —502. ii.
 —503. ii. —504. ii. —to
 provoke, 506. i. ii. —invo-
 luntary, ib. —508. ii. —
 to provoke, ib. —509. ii.
 —513. i. —Incontinentie
 of, 516. ii. —to promote,
 517. ii. —involuntary, 522.
 i. —523. ii. —525. ii. —
 to provoke, ib. —526. i. —
 527. ii. —528. ii. —con-
 tinent, 529. ii. —bloody,
 530. ii. —to promote, 580.
 ii. —589. i. —Heat of,
 596. ii. —to provoke, 619.
 i. —797. i. 799. i. —801.
 ii. —811. ii. —bloody,
 813. ii.
Urfus, 534. ii.
Urtica, 470. i. ii. —*Mortua*,
 vid. *Lamium Album*, 352.
 ii. —*Marino*, 534. ii.
Ufnea Cranii Humani, 470. ii.
 Uterus, and Uterine Disor-
 ders, 211. ii. —219. ii. —
 234. i. —240. ii. —245.
 ii. —252. i. —257. i. —
 263. i. —268. i. ii. —272.
 i. —280. ii. —292. ii. —
 293. i. —301. ii. —306. i.
 —308. i. —314. i. —318.
 ii. —319. ii. —320. i. —
 322. ii. —344. i. ii. —347.
 ii. —353. i. ii. —359. i. —
 360. i. —362. ii. —363.
 i. ii. —367. i. —368. i. —
 372. ii. —375. ii. —376. ii.
 379. i. —385. i. —386. ii.
 —389. ii. —399. i. —421.
 ii. —422. i. —423. ii. —
 433. i. —449. ii. —453. i.
 —464. ii. —487. ii. —491.
 i. —494. i. —498. ii. —
 500. ii. —504. ii. —
 505. ii. —507. i. —
 516. ii. —522. ii. —525.
 i. —584. ii. —590. ii. —
 596. i. —643. i. —650. ii.
 —681. i. —697. i. —715. i.
 —764. ii.
Uva, 572. i. —*Crispa*, vid.
Grossularia, 329. ii. —
Marina, vid. *Eppedra*, 314.
 i. —*Passa major*, et minor,
 vid. *Vitis*, 469. i. —*Urfi*,
 vid. *Vaccinia*, 463. ii.
Vulneraria, vid. *Anthyllis Le-*
guminosa, 234. i.
 Vulnerary-water, 646. i.
 Vulpanfer, 534. ii.
 Vulpes, 534. ii.
 Vultur, (Vulture) 535. i.
 Uvula, Swellings of the,
 261. i. —relaxed, 261. i.
 —357. ii. —inflamed, 344.
 i. —389. i. —392. ii. —
 496. ii. —510. ii. —511.
 ii. —fallen, 592. i.
Uvularia, vid. *Biflingua*,
 255. i.

W.

 Hat, 385. ii.
 Wake Robin, 239.
 i.
 Wall-flower, 356. ii.
 Walnut-tree, 382. i.
 Watchings continual, 266.
 ii. —421. i. —581. i.
 Warmth to the Feet and
 Hands to restore, 273. ii.
 —303. ii.
 Warren-vein, 568. ii.
 Water described, 25 to 40;
 its Weight, 25. ii. —Flu-
 idity, 26. i. —constituent
 Particles, ib. —enters not
 the Pores of many Bodies,
 ib. —various Effects of it,
 ii. —dissolves as well as en-
 ters many Bodies, 27. ii.
 —28. 29. —those not dis-
 solvable by it, 29. i. —
 contains other Bodies, ii. —
 its Purity discovered by its
 Lightness, &c. i. ii. —how
 to discover that which is
 impure, 31. i. —that of
 Rain, ib. —of Snow, Ice,
 and Hail, 32. i. —of a
 Spring or Fountain, ii. —
 of Rivers, 33. i. —those
 of the Island of *Formosa*
 fatal, ii. —of the *Thames*
 best for Sea-service, ib. —
 from a Well or Pump, ib.
 —Stagnant, or Pond, 34.
 i. —to discover wherewith
 impregnated, ii. 35. i. —
 Methods to render it pure,
 ii. —how to preserve it,
 36. i. —its Uses, ii. —
 the Nutrition of Animals,
 37. i. —its Medicinal Uses,
 38. i. —cold, its Effects,
 ii. —39. i. —warmed,
 ii.
 Water-deck, great, 260. ii.
 —*Virginian*, 261. i.
 Water-wagtail, 521. ii.
 Waters, Simple, Rules for
 the Distillation of, 627. ii.
 & seq. —Vegetables pro-
 per for them, 932. ii. —
 further Directions, 634.
 ii. & seq. —Compound
 or Spirituous, 629. & seq.
 —Rules for Distilling them,
 641. i. —by Infusion and
 Vinegar, 656. —Mineral,
 542. i.
 Waters, from the Abdomen,
 to discharge, 263. i.
 Warts, how to extirpate,
 74. i. —141. i. —228. ii.
 —294. ii. —337. i. —
 386. i. —412. i. —415.
 ii. —426. ii. —458. i. —
 472. ii. —485. i. —493.
 i. —517. i. —523. ii. —
 789. ii. —815. ii. —822.
 ii.
 Wart-wort, 458. i.
 Wasp, 533. ii.
 Wax, Butter of, 794. ii. —
 Oil of, 795. i.
 Wayfaring-tree, 496. ii.
 Weariness, 393. i.
 Weasel, 522. ii.
 Weaver, 526. i.
 Weed, Green, or Dyers,
 324. i.
 Weepings, perpetual, 303.
 ii.
 Weights, 623. i. ii.
 Whale, 486. i. —530. i.
 Wheat, 461. ii. —*Indian*,
 462. i.
 Whelk, 490. i.
 Whet-stone, 559. i.
 Whey, 140. i.
 White Cerate, 759. ii. —
 Liniment, 754. i. —Oint-
 ment, 745. i. —with Cam-
 phire, ib.
 Whites, Fluor Albus, 151.
 ii. —200. ii.
 Whiting, 485. i.
 Whitloes, 526. ii.
 Whitlow-grafs, 224. i.
 Whortles, black, 463. ii.
 —*Spanish*, ib. —white,
 479. ii.
 Widow-wail, 285. ii.
 Willow, common, 426. ii.
 —red, and Rose, ib. —
 spiked, 447. ii.

P P P

I N D E X.

- Willow-herb, yellow, 362, ii. —spiked, ib. —346, ii. headed, 437, i.
- Wind, 282, i. —224, ii. —225, ii. —237, ii. —250, ii. —277, i. —279, ii. —280, i. ii. —281, i. —305, ii. —322, ii. —347, ii. —405, i.
- Winds, *Etesian* or North-East, their good Effects, against the pestilential Southern ones, 10, ii. —11, i. —their other Properties, ii. —various, according to the Points from whence they proceed, 12, i. —their Agitation necessary, ii. —13, i. —have affected whole Armies, 11, i. —18, i. —Northern and Eastern produces Nitre, 113, ii.
- Wine, 616, to 621, —Spirit of, 648, i. —with Camphire, 686, i.
- Wines, or vinous Liquors, their Fermentations, 102, to 107, —its Mother, 113, i.
- Winteranus Cortex*, vid. *Cort. Wint.* 301, i.
- Winter-green, 414, i. —smaller, ii.
- Witchcraft, Charm against, 326, ii. —400, i.
- Wood, 327, i.
- Wolf, 518, i. —Sea, ib.
- Wolfe-bane, wholesome, 233, ii.
- Womb, Disorders of, 268, i. —359, ii. —394, ii.
- Women in Child-bed, &c. 240, ii. —286, i. —292, i. ii. —308, ii. —depraved Appetite, 310, i. pregnant, 396, ii. —Weakness of Stomach, 428, i. —in Child-bed, 647, ii. —with Child, 831, i.
- Women, young, Disorders of, 262, i. —Malacia, 293, i. —of *Barbary*, 401, ii. —Cachexy of, 428, i.
- Wonderful-water, 644, ii.
- Wood, nephritic, 326, ii.
- Wood-bine, 275, ii.
- Wood-cock, 509, i.
- Wood-eater, 532, i.
- Wood-lice, 519, ii.
- Wood-peas, 390, ii.
- Wood-roof, 243, ii.
- Woods, Decoction of the, 690, i.
- Worm, Blink or Sloe, 492, i. —Glow, 502, i. —Gal-ly, 513, ii. —Earth, 517, ii.
- Worm-powder, 715, ii.
- Worms, Remedies against, 82, i. —201, i. ii. —202, i. —209, i. —216, i. —218, i. —222, i. 237, ii. —246, ii. —252, i. —255, ii. —(in Corn, to kill, 257, ii.) —261, ii. —in the Intestines, 262, i. —268, ii. —275, i. —277, ii. —278, ii. —284, i. —289, ii. —299, ii. —309, i. ii. —312, ii. —318, ii. —323, i. —329, ii. —336, ii. —343, ii. —357, ii. —364, ii. —371, i. —375, ii. —378, i. —399, ii. —420, ii. —423, i. —424, i. —431, i. —435, ii. —440, i. —452, i. —457, i. —478, i. —483, i. —488, i. ii. —501, i. —509, ii. —525, i. —540, i. —541, ii. —559, ii. —572, i. —(in Cattle, ib.) —573, ii. —590, ii. —599, ii. —605, ii. —637, ii. —754, i. —764, ii. —790, ii. —811, ii. —812, i. —814, i. —819, i. —823, i. —824, i. ii. —Ointment against, 753, ii.
- Wormseed, 431, i. —green, ib. —*French*, 474, i. —*Arabian*, ib. —white, 299, ii.
- Wormwood, 202, i. ii. —203, i. —*French* Sea, 474, i. —Extract of, 771, i. —Oil of, 738, ii. —762, i. —Salt of, 775, i.
- Wormwood-water, Compound, 641, ii. —Simple, 637, ii.
- Wounds, 174, i. ii. —208, ii. —214, i. —222, i. —229, ii. —234, ii. —236, i. —238, ii. —240, i. ii. —244, i. —241, i. —249, ii. —240, i. —255, ii. —258, ii. —259, i. —recent, 260, i. in general, 264, i. ii. —265, i. —274, i. —of the Legs, 275, ii. —recent, 276, ii. —in general, 280, ii. —284, i. —307, i. —311, i. —313, ii. —314, ii. —321, ii. —325, i. —(of Horses, 327, i.) —343, i. ii. —344, i. —352, i. —353, ii. —359, i. —360, i. —362, i. ii. —371, i. —379, i. —recent, 385, ii. —392, ii. —396, ii. —398, i. —399, i. ii. —400, ii. —407, i. —409, i. —Gun-shot, 411, i. ii. —413, ii. —(of Horses, 414, i.) —422, ii. —431, ii. —435, ii. —envenomed, 436, ii. —445, i. —442, i. —446, ii. —448, i. —451, i. —recent, 451, i. —543, ii. —460, i. —464, ii. —465, i. —468, i. —477, i. —484, ii. —492, ii. —503, i. —recent, 503, ii. —505, i. —511, i. ii. —512, i. ii. —recent, 514, i. —517, i. ii. —to consolidate, 523, ii. —to dry, 524, ii. —recent, ib. —526, i. —of the Head, 534, i. —to cicatrize, 548, bleeding, 549, i. —to dry, 559, ii. —recent, 560, ii. —595, ii. —612, ii. —646, ii. —recent, 738, i. —Gun-shot, 743, ii. —744, i.
- Wound-wort, *Doria*, 310, i.
- Wrass, 533, i.
- Wren, 525, i.
- Wrinkles, 558, i.
- Wrong-heir, 492, ii.

X.

- X** *Anthium*, vid. *Bardana*, 250, ii.
- Xochinacaxtli*, 472, i.
- Xylon*, 328, ii.
- Xylo-aloes*, vid. *Agallochum*, 209, ii.
- Xylolbalsam*, 248, ii. —472, ii.
- Xyris*, vid. *Iris Foetida*, 346, i.

Y.

- Y** Arrow, 373, i.
- Yaws, 504, ii.
- Yellow Cerate, 759, ii. —Ointment, 478, i.
- Yellow-hammer, 508, i.
- Yew-tree, 452, ii.
- Young, of both Sexes, 685, ii.
- Yucca*, 472, ii.

Z.

I N D E X.

Z.

Z *Acintha*, 472, ii.
Zea, 472, ii. —473,
Zedoaria, 473, i.
Zeopryum, vid. *Triticum*,

i. —*Monococcus*, vid. *Bri-*
za, 261, ii.
Zebetum, 535, i.
Zedoaria, 473, i.
Zeopryum, vid. *Triticum*,
 461, ii.
Zingi, 473, ii.
Zingiber, 473, ii.
Zizyphus, vid. *Jubaba*, 346,

There having been some material Additions made, after the *Index* was committed to the Press, they have occasioned the following Alterations in the *Numbers*, which the Reader is desired to correct.

Under the Word *Acrimony*, read 835, ii. —
Ætbiops Min. supply *Medicinalis Plummerii*. (*Plummer's Medicinal*) 381, ii. —
Agues, r. 835, ii. —*Antibet.* Pot. 834, i. —*Antimony*, r. 827, ii. —829, i. —831, ii. —for 832, ii. —r. 833, i. —*Apoplexies*, r. 834, ii. —*Bezoar*, r. 833, ii. —of Tin, *ib.* —*Bezoard Min.* r. 833, ii. —*Jow.* *ib.* —*Blood*, sup. 813, ii. —*Blood-spitt.* dele 813, ii. —r. 835, ii. —*Cachexies*, r. 834, ii. —*Cataracts*, sup. 836, i. —*Charact.* f. 624, r. 623, —*Children's*, r. 835, i. —*Cinnabaris Ant.* f. 832, ii. r. 833, i. —*Coughs*, dele 622, i. —*Distempers*, r. 826, ii. —834, ii. —*Dropsies*, r. 834, ii. —*Dysentery*, f. 828, ii. r. 829, i. —f. 835, ii. r. 836, i. —*Dysury*, f. 835, ii. r. 836, i. —*Epilepsies*, r. 834, ii. —*Expector.* f. 622, r. 621, —*Flowers*, r. 622, —*Girls*, f. 835, ii. r. 836, i. —*Head*, r. 834, ii. —*Heats*, f. 622, i. r. 621, ii. —*Herbs*, f. 623, r. 622, —*Jaundice*, r. 834, ii. —*Kermes*, f. 834, ii. r. 835, i. —*Liver*, r. 835, ii. —(*Inferit Maudlin*, 211, i.) —*Measles*, r. 835, ii. —*Mercurius*, f. 832, ii. r. 833, i. —*Murrain*, sup. 826, i. —*Peripneum.* f. 835, i. r. 836, i. —*Pleurisies*, f. 835, ii. r. 836, i. —*Poudre*, f. 834, ii. r. 835, i. *Pulvis*, sup. *Carthustianorum*, 835, i. —*Scurvy*, r. 835, ii. 836, i. —*Sight*, r. 834, ii. —*Smallpox*, r. 826, ii. —835, ii. —*Stomach*, f. 834, r. 835, i. —*Sulph. Aurat.* r. 831, ii. —*Tartar. Emet.* r. 834, ii. —*Inferit Thermometer*, 180, i. —*Venereal*, sup. 834, ii. —*Viscera*, r. 834, ii. —*Vitrum Ant.* r. 829, ii.

Books Just Publish'd, Printed for JAMES HODGES, at the Looking-Glass, over against St. Magnus's-Church, London-Bridge.

I. **T**HE Nature of an intermitting Fever and Ague consider'd: Wherein is explain'd, The Cause of each succeeding Symptom, and their periodical Returns: With the best and most rational Method of cure. Such Cures also are accounted for, as have been obtain'd by Spirits, Acids, Charms, Frights, Emetics, Cathartics; Sudorifics, hot and cold Bathing. With Reasons and Cases to prove, how the Bark in many Instances doth Cure, and why in many others it doth not, and when judiciously given seldom fails; in Order to obviate the Mistakes of those who are prejudic'd against that incomparable Medicine. To which is added, an extraordinary Case of one Widow SPARKES, of Eighty Years of Age, who upon the Cure of an Ulcer in

her Leg, had her Menfes return, after they had left her thirty Years, and they continued their regular Periods. Price bound in Calf 4 s.

II. The good and bad Effects of Tea consider'd: Wherein are exhibited the physical Virtues of Tea; its general and particular Use; to what Constitutions agreeable, at what Times and Seasons it is most proper to be drank; and when, and how prejudicial. To which are subjoined some Considerations on Afternoon Tea-drinking, and the many subsequent Evils attending it; with a Perswasion to the Use of our own wholesome Product, Sage, &c. Price 1 s.

The above by SIMON MASON of Cambridge,

BOOKS Printed for J. HODGES.

III. A Treatise on the Powers of Medicines, by the late learned Herman Boerhaave, Doctor of Philosophy and Physic, and Professor of Physic, Botany, and Chymistry in the University of Leyden. Translated from the most correct Latin Edition, by JOHN MARTYN Fellow of the Royal Society and Professor of Botany in the University of Cambridge. Price bound in Calf 5 s.

IV. The Ladies Dispensatory; or, every Woman her own Physician: Treating of the Nature, Causes, and various Symptoms of all the Diseases, Infirmities, and Disorders, natural and contracted, that most peculiarly affect the Fair Sex, in all their different Situations of Life; as Maids, married Women, and Widows, &c. Price bound 2 s. 6 d.

V. Dr. SYDENHAM's compleat Method of curing all Diseases, and Description of all their Symptoms; to which are now added, five Discourses by the same Author, concerning the Pleurisy, Gout, hysterical Passion, Dropsy, Rheumatism, &c. Price bound 1 s. 6 d.

VI. The whole Works of Dr. ARCHIBALD PITCAIRN, published by himself. Wherein are discover'd, the true Foundation and Principles of the Art of Physic; with Cases and Observations upon most Distempers and Medicines. Done from the Latin Original by George Sewell, Mr. D. and J. T. Desaguliers, D. D. and F. R. S. To which is added an Account of the Author. Price bound in Calf 4 s.

VII. Nature Delineated: Being Philosophical Conversations; wherein the wonderful Works of Providence, in the Animal, Vegetable, and Mineral Creation are laid open; the Solar and Planetary System, and whatever is curious in the Mathematicks, explained. The Whole being a Compleat Course of Natural and Experimental Philosophy; calculated for the Instruction of Youth; in order to prepare them for an early Knowledge of Natural History, and create in their Minds an exalted Idea of the Wisdom of the GREAT CREATOR. Written by Way of Dialogue, to render the Conception more familiar and easy. Translated from the Original French, by JOHN KELLY, of the Inner Temple, Esq; D. BELLAMY of St. John's College, Oxford; and J. SPARROW, Surgeon and Mathematician. Neatly printed, on a new Letter, and Superfine Paper, in Four Volumes, 12mo. Price bound in Calf 12 s. The third Edition carefully revised and corrected, with large Additions, embellished with great Variety of Copper Plates, representing the principal Subjects treated of, with a Table of Contents, and a Compleat and Copious Index to each Volume.

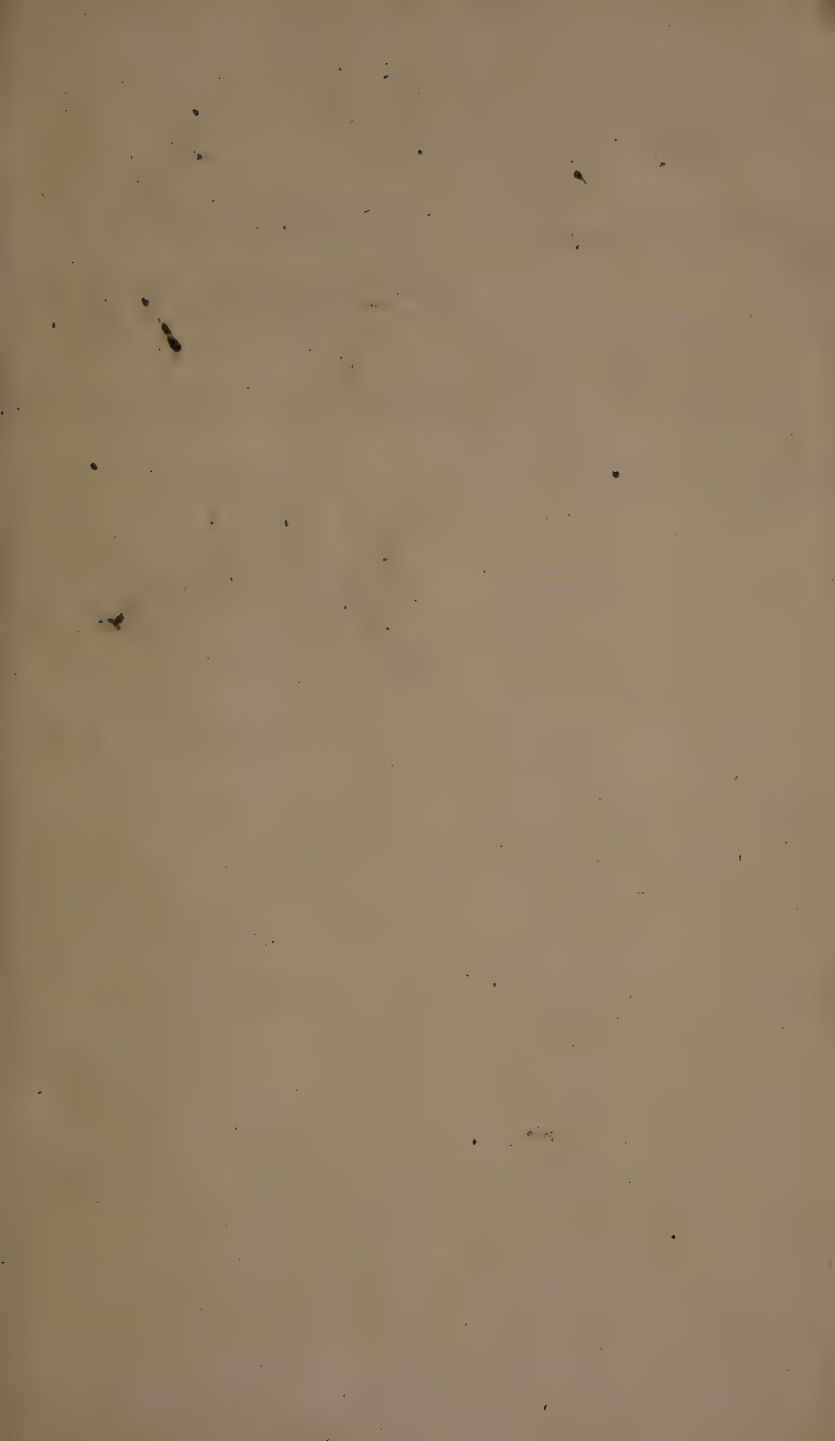
These Volumes contain a curious Account of the Original and last State of all the various Productions of Nature, with the Uses they are applied to, and the Benefit Mankind receive therefrom, comprehending all Manner of Insects, Beasts, Birds, Fishes, Fruits, Flowers, Gardens, Orchards, Vineyards, Forests, Quarries, the several Sorts of Stones, as Diamonds, Rubies, &c. an Account of the Atmosphere, Sun, Moon, Eclipses, Painting, Engraving, Statuary, Dyalling, Geometry, &c. with whatever is curious and remarkable throughout the terrestrial Globe, being not only a useful Companion to those who are acquainted with the Subjects treated of, but also very necessary for instructing the Youth of both Sexes, having lately been introduced and well received in most of the great Schools throughout the Kingdoms of Great Britain and Ireland.

VIII. A Collection of scarce and valuable Treatises upon Metals, Mines, and Minerals: Being a Translation from the learned Albazo Alonso Barba, Director of the Mines at Potosi, in the Spanish West-Indies, and the Observations of several ingenious Persons of our own County, founded on many Years Experience. Price bound 3 s.

IX. The History of the Life and Reign of LEWIS XIV, King of France and Navarre: Containing an exact and comprehensive Relation of all the Battles, Sieges, Insurrections, Negotiations, Intrigues, and secret Designs; Literary and other Foundations. Inventions, and Improvements; Contests and Proceedings, Ecclesiastical and Civil; with whatever else is memorable in that long and active Reign. With Characters of the principal Persons concerned in them, and Reflections on the most remarkable Events. In 3 Vols.

X. The History of the Life and Reign of WILLIAM III. King of England, Prince of Orange, and Hereditary Statholder of the United Provinces: Containing a Series of memorable Efforts, Military and Political, for Maintaining the Liberties of Europe against the Encroachments of Popery and Arbitrary Power. Introduced with a brief Account of the History and Genealogy of his Family.

XI. A New History of the Life and Reign of the CZAR PETER the Great, Emperor of all Russia, and Father of his Country. Containing his Wars with the Swedes, Turks, Tartars, and Persians. His Travels, Studies, and Personal Fatigues. With a distinct Account of whatever is remarkable throughout his Reign; and a correct Geographical Description of that extensive Empire.



th
Monday July 20 1807
Sent Mrs Barlowe Dacosta's
Principles of Conchology Octo.
coloured Mr Liddon presents
at same time.

